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ABSTRACT

This guide presents the "minimum teaching essentials" published by the New York City Board of Education for grade 6. Covered are the following subject areas: (1) art; (2) bilingual education; (3) career education; (4) health education; (5) library media; (6) mathematics; (7) music; (8) physical education; (9) science; and (10) social studies. Work study skills for these subjects, in addition to English as a second language and communication arts, are given with content areas and descriptors for specific skills and knowledge objectives. The communication arts section covers grades K-7 and the section on child development covers grades 6-9. Appended are phonemes tables and a list of curriculum publications. (Author/APM)

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MINIMUM TEACHING ESSENTIALS

Grade 6

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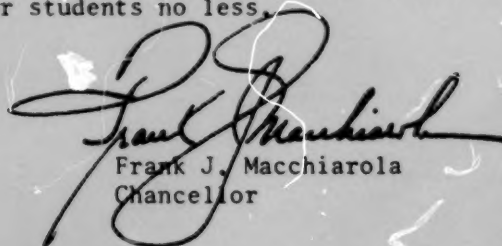
Minimum Teaching Essentials: Grade 9 is excerpted from Minimum Teaching Essentials Grade K-9. The content areas and topics for Communication Arts through grade 7 are included as well as Career Education topics from K through 9.

Foreword

Decentralization imposes upon District Community School Boards the responsibility to control and operate, in a form consistent with the policies of the Central Board of Education, all pre-kindergarten, nursery, kindergarten, elementary, intermediate, and junior high schools. Community Boards also decide matters of instruction and select textbooks and ancillary materials, subject to the prior approval of the Chancellor. Decentralization thus allows districts the flexibility and differentiation necessary to meet the varying needs of their students.

At the same time, the decentralization law also continues the power vested in the Office of the Chancellor to "promulgate minimum educational standards and curriculum requirements for all schools and programs throughout the city district."* It is hoped that Minimum Teaching Essentials K-9 will provide every educator with the knowledge of what must be taught in content and basic skills for each grade level in all curriculum areas, thus offering every student an instructional program governed by the approved curriculum. Presenting such essentials is also a step toward creating the continuity of instruction desirable for a city with high pupil mobility.

Students in most classrooms will be taught more than is specified as a minimum. Supervisors and teachers will innovate, enrich, and extend curricula whenever possible. But this bulletin forms the teaching base required to maintain educational standards and ensure appropriate learning opportunities in every classroom. We can offer our students no less.



Frank J. Macchiarola
Chancellor

* New York State Education Law, Article 52, paragraph 2590-h.

Acknowledgments

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Arts and Humanities: Florence Jackson, Director; Grace George Alexander-Green, Head of Art Unit; Anita Dore, Director of English; David Weiss, Assistant Director of Foreign Languages; John Motley, Director of Music; Albert Post, Assistant Director of Social Studies

Bilingual Education: Hernan Lafontaine, Executive Administrator

Career and Occupational Education: George Quarles, Chief Administrator; Juanita Ward, Project Director, Career Education Unit; Herbert Siegal, Director of Industrial Arts; Kathleen Rogers, Director of Home Economics; Norman Watnick, Assistant Director of Business and Distributive Education

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*The organizational structure and titles throughout the acknowledgments are those in effect at the time of initial printing.

Mathematics and Science: Frank Wohlfort, Assistant
Director of Mathematics; Sam Fried, Assistant
Director of Science
School Development: Hortense Jones, Director
Library, Media and Telecommunication: Morris Freedman,
Director; Geraldine Clark, Assistant Director, Head
of Library Unit
Reading: Marian Power, Director (Acting)

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district supervisors and members of institutions of
higher education whose suggestions have contributed
greatly to this document.

Because of the large number of individual contributors,
names have been listed in the section entitled Credits.

Introduction

This revised edition of Minimum Teaching Essentials K-9 presents the minimum in basic skills and knowledge which must be taught within each curriculum area. It does not constitute the full scope of the various courses of study. It should also be noted that this publication does not include teacher methodology, student attitudes and appreciations, or moral and ethical values. Previously published bulletins provide the necessary support to help education design and implement the complete and appropriate curriculum. The purpose of this document is to provide administrators, teachers, parents, and other members of the educational community with a comprehensive resource which identifies, within all disciplines, the basic body of knowledge and skills to be taught at each grade or level.

The organization of the bulletin begins with a broad perspective of each subject area. These statements highlight the major components of the individual disciplines and indicate the role each area plays in the total educational process. Statements of the philosophy, goals, and guidelines for bilingual education are included. Career education is represented with basic understandings for each grade.

Reading and language arts are integrated as "communication arts," reflecting the interdependent nature of listening, speaking, reading and writing. This arrangement also reinforces the principle that specific reading skills are a means to increase students' abilities to read for pleasure and information, and are not ends in themselves. The communication arts section is presented in uninterrupted sequence K-9 and precedes the other subject areas.

A child development focus appears before grades K-2, 3-5, and 6-9. This section reviews children's basic psychological needs, and the physical, socio-emotional, and intellectual growth patterns expected of a particular age group. The work-study skills used in all subject areas are presented in chart form for K-2, 3-5, and 6-9.

English as a second language and foreign languages in the elementary school (FLFS) are also treated by levels and precede the subjects which are grouped by grade. Specialized subjects for the intermediate or junior high school are presented course by course. These are: foreign languages, home economics, industrial arts, and typewriting.

All other curriculum subjects within a grade level are grouped together, i.e., for the third grade the order is art, health education, library-media, music, physical education, science, and social studies. Each page presents content area and/or topics with descriptors for specific skills and knowledge. References for suggested classroom implementation are keyed to existing bulletins where relevant. Bulletin titles are found on the first page of subject areas for each grade. Some subjects offer suggestions for the number of days or weeks to be devoted to a topic within that area.

The publication of this bulletin represents a major step in establishing minimum curriculum essentials. The translation of these standards into effective learning for every student will be realized only with the creative skill and dedication of all of us in the educational community of New York City.

Arnold Webb
Executive Director

Overview of Curriculum Areas

ART

Growth in art expression is part of the total growth of the child. When the experience which motivates the art is child centered, authentic, and personal, the art product will ring true.

The child gains power in self-expression when the art experiences have continuity, when they provide leeway for self-evaluation, and when they build upon cumulative skills in the making of art products.

All children need rich art experiences which are integral to their total physical, perceptual, mental and social development.

BILINGUAL EDUCATION

One of the most fundamental and universally acceptable concepts in education is that an instructional program should utilize the student's already acquired language skills and thought processes as a basis for fostering intellectual development and mastery of the basic skills of communication and reasoning. This concept is equally valid for all pupils, and it is especially appropriate for students living within our society whose language and culture differ from our own. Educational success for linguistically different students is enhanced by permitting them to learn in their first language while they are learning to function successfully in English. Thus, they will have an opportunity to be better prepared to participate meaningfully within their new environment. The primary goals of a bilingual education program are excellence in both languages and the development of basic skills. The inherent validity of these goals makes it clear that bilingual programs can be made available to all pupils within our system for the purpose of enriching their educational and life experiences. It is felt that this comprehensive approach will lead to the preparation of an individual who will be capable of leading a full and productive life, possessing the ability to adapt to new demands, opportunities, and values in a constantly changing world.

Bilingual education has been defined as the use of two languages as mediums of instruction for the same pupil population in a well-organized program which encompasses part or all of the regular curriculum and which includes the study of the history and culture associated with both languages. In the United States, of course, one of the two languages will be English. The bilingual program incorporates an interdisciplinary approach which includes all the required curriculum areas that are part of the traditional school program. Thus, for example, the mathematics curriculum will include the same scope and sequence made available to other students, the only difference being the use of a language other than English as the vehicle for instruction.

ELEMENTS OF A BILINGUAL PROGRAM

Every bilingual program which sets the aforementioned goals and objectives should include the following elements:

PROVISION FOR THE REINFORCEMENT AND SEQUENTIAL DEVELOPMENT OF THE PUPIL'S DOMINANT LANGUAGE

It provides for language arts instruction in the pupil's native language, in which the four language skills will be developed sequentially, e.g., listening, speaking, reading, and writing. Thus, we use the language in which the child has already acquired the sound system, basic structure, and vocabulary in the development of cognitive as well as other skills.

DEVELOPMENT OF THE ABILITY TO UNDERSTAND, SPEAK, READ, AND WRITE A SECOND LANGUAGE

The student begins immediately to learn the second language through the utilization of a sequentially based methodology in second language teaching. A typical English as a second language program will begin with an emphasis on aural and oral skills, and gradually reaches the stage where the student can advance to reading and writing.

PROVISION FOR SEQUENTIAL INSTRUCTION IN THE STUDENT'S NATIVE LANGUAGE IN THE CURRICULUM AREAS CONSISTENT WITH THE ESTABLISHED REQUIREMENTS FOR THE CITY'S SCHOOLS

Content areas which are considered to be critical to the intellectual and emotional development of students and to their success in the school environment are initially taught through the use of their first language, thereby permitting and encouraging them to enter and participate immediately in all classroom activities and draw from previous experiences as bases for developing new ideas and concepts.

DEVELOPMENT, REINFORCEMENT, AND ENRICHMENT OF
STUDENTS' APPRECIATION AND KNOWLEDGE OF THEIR
OWN HISTORY AND CULTURE, AS WELL AS THE HISTORY
AND CULTURE ASSOCIATED WITH THE SECOND LANGUAGE

The historical contributions and cultural characteristics identified with the people representing both linguistic communities are an integral part of the program. Relationships, similarities, and differences are presented in the social development of state, nation, and community, in order to create an understanding and appreciation of each in a positive rather than a negative sense.

BILINGUAL EDUCATION

By providing the opportunities for successful participation and achievement, students are encouraged to develop acceptance of themselves and of others through social interaction.

Career education is an educational approach which seeks to provide students with the knowledge and skills necessary for becoming self-fulfilled and productive members of society. It incorporates large components of the humanistic and experiential learning movements, and seeks to educate the total person. It is as concerned with the development of basic academic skills as it is with the development of career awareness and occupational skills. It seeks to expand, not narrow, the learner's career horizons by incorporating into the regular curriculum concepts of personal growth and career development. Career education is a process, not a product. It is a process which seeks to make the educational experience more meaningful through bridging the gap between what is taught in the classroom and what the learner perceives as going on in the "real" world.

CAREER EDUCATION

To accomplish this, it offers a variety of strategies sculpted around the concept of working its eight essential elements into the classroom on a daily basis. These elements are:

- | | |
|------------------------------|-------------------------|
| .self awareness | .educational awareness |
| .decision-making skills | .career awareness |
| .attitudes and appreciations | .beginning competencies |
| .economic awareness | .employability skills |

Such elements as career awareness, educational awareness, and economic awareness seek to inform the learner of the broad vista of career possibilities; establish a link between what is being taught in school and what goes on in the world outside the classroom, and give the learner an understanding of the roles of consumer, producer, and provider as these operate in the larger economic society.

Such elements as self-awareness, decision-making skills, and attitudes and appreciations seek to give learners insight into their own abilities, interests, and thought processes; and help them understand the dynamics of decision-making:

foreseeing consequences, considering alternatives, making a decision, acting on it, and assessing the outcome; provide them with decision-making experiences in real and simulated situations; assist them in exploring personal values, and in relating these values to school experiences and possible career options.

Such elements as beginning competencies and employability skills seek to give learners a strong foundation of basic academic and manipulative skills essential to success in school and work and provide them with the specific skills necessary for further education or training, or for entry-level employment. An emphasis on "hands-on," learning by doing, is a shaping factor of all career education.

The main strategy for implementing career education in the classroom is infusion. Infusion is the incorporation of at least one of the eight career education elements mentioned above into the regular curriculum, giving the resultant lesson, be it math, science, language arts, social studies, or some other subject area, a career education focus (see diagram).

Career education is much more, then, than just teaching about jobs. On the following pages, basic understandings for each grade, K - 9, are presented to provide a framework for career education implementation at the classroom level. These outcomes are adapted from the National Career Education Model Goal Statements.

REGULAR CURRICULUM
TOPICS

Selected Topic

INFUSED LESSON

Approach and presentation of topic changed through incorporating the career education element(s)

CAREER EDUCATION
8 ELEMENTS

Selected Career Education Elements(s)

In addition to the infusion of a career education element, occupational information may frequently be incorporated in a lesson. The Basic Occupational Clusters into which careers are grouped are:

Health
Marine Science
Consumer and Homemaking Education
Manufacturing
Marketing and Distribution
Public Service
Agri-Business and Natural Resources
Communications and Media

Transportation
Fine Arts and Humanities
Personal Services
Construction
Environment
Business and Office
Hospitality and Recreation

CAREER EDUCATION KINDERGARTEN

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

The individual has rights and responsibilities at home and at school.

DECISION MAKING

Decisions are based on motivating causes and lead to resultant consequences.

ATTITUDES AND APPRECIATIONS

Each person is an important component of the home unit.

CAREER AWARENESS

People at home and at school have different jobs.

ECONOMIC AWARENESS

Some items are available in the home unit; others are needed, and still others are wanted.

EDUCATIONAL AWARENESS

Similar kinds of roles exist at home and in school.

BEGINNING COMPETENCY

Specific tools are necessary to specific kinds of work.

EMPLOYABILITY SKILLS

Sharing and cooperation are necessary to complete many tasks.

CAREER EDUCATION GRADE ONE

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

The individual is valuable as a person and as a part of a group.

DECISION MAKING

An individual's decisions have personal consequences.

ATTITUDES AND APPRECIATIONS

Each member of the group in the school setting has something to contribute to the whole.

CAREER AWARENESS

Jobs done by people at home and people in school relate to the functioning of the general community.

ECONOMIC AWARENESS

The community depends upon the exchange of goods and services.

EDUCATIONAL AWARENESS

Roles in school have similarities to and differences from roles at home.

BEGINNING COMPETENCY

Mastery of basic skills is essential to success in school.

EMPLOYABILITY SKILLS

Each individual develops rules with others, accepts direction, and takes responsibility.

CAREER EDUCATION GRADE TWO

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

People have different capabilities and limitations.

DECISION MAKING

Problems can be analyzed for their alternative solutions.
These can be expressed verbally and in written form.

ATTITUDES AND APPRECIATIONS

Getting along with other people is important.

CAREER AWARENESS

There is an interdependency of jobs necessary to
maintain the community.

ECONOMIC AWARENESS

The barter system and the money exchange system
are two different ways to operate an economy.

EDUCATIONAL AWARENESS

Life roles in the community are related to the development
of basic skills.

BEGINNING COMPETENCY

There is a variety of communication tools which
affect lifestyle and career choice.

EMPLOYABILITY SKILLS

Ways of interacting affect achievement of individual
and group goals.

CAREER EDUCATION GRADE THREE

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

Attitudes toward learning tools are important in achieving individual goals.

DECISION MAKING

There are various identifiable components to the decision-making process.

ATTITUDES AND APPRECIATIONS

Community members contribute to the everyday life patterns of students and others.

CAREER AWARENESS

Local jobs belong to the larger framework of jobs in general.

ECONOMIC AWARENESS

We are part of a monetary system.

EDUCATIONAL AWARENESS

Life roles have a foundation in learned skills.

BEGINNING COMPETENCY

Tools affect lifestyle and future career choice.

EMPLOYABILITY SKILLS

Conflicts between personal and group goals can be resolved in different ways.

CAREER EDUCATION GRADE FOUR

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

Peer group members have different strengths and weaknesses.

DECISION MAKING

Goals are an important factor in lifestyle decisions.

ATTITUDES AND APPRECIATIONS

The wage earner's job affects the home unit.

CAREER AWARENESS

Jobs can be grouped into occupational clusters.

ECONOMIC AWARENESS

The production and distribution of goods and services are part of the overall economic process.

EDUCATIONAL AWARENESS

Individual success is related to mastery of educational skills.

BEGINNING COMPETENCY

Tools and simple machines are used to measure and extend energy.

EMPLOYABILITY SKILLS

Personal and group goals are developed by full participation in group activities.

CAREER EDUCATION GRADE FIVE

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

The worker has both rights and responsibilities.

DECISION MAKING

The decision-making process can be applied to school-related problems.

ATTITUDES AND APPRECIATIONS

Working roles have advantages and disadvantages.

CAREER AWARENESS

Different lifestyles are associated with each occupational cluster.

ECONOMIC AWARENESS

There is a law of supply and demand.

EDUCATIONAL AWARENESS

The role of the individual is related to environment and to the roles of selected adults.

BEGINNING COMPETENCY

Mass production calls for division and specialization of labor. Measurement tools can be mastered.

EMPLOYABILITY SKILLS

The school environment is related to the larger society and has similar needs for structure and order.

CAREER EDUCATION GRADE SIX

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

An understanding of one's strengths and preferences helps in the selection of appropriate career clusters.

DECISION MAKING

The decision-making process can be applied to home and social-related problems.

ATTITUDES AND APPRECIATIONS

Personal growth and development are tied to one's occupational endeavors.

CAREER AWARENESS

Occupational clusters and the jobs within them require specific abilities and skills.

ECONOMIC AWARENESS

Specialization creates an interdependent society.

EDUCATIONAL AWARENESS

Reading, writing, number skills, and science are used in various occupational areas.

BEGINNING COMPETENCY

Tools and processes are used in research. Simple machines combine to produce complex machinery

EMPLOYABILITY SKILLS

The individual's role in society affects personal satisfaction and group achievement and morale.

CAREER EDUCATION GRADE SEVEN

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

Interests and abilities are related to choice of occupational cluster.

DECISION MAKING

Alternative solutions to problems have different long and short-term effects.

ATTITUDES AND APPRECIATIONS

The value of work is not necessarily tied to its monetary rewards or social status.

CAREER AWARENESS

Attitudes and values relate to choice of occupational cluster.

ECONOMIC AWARENESS

Management of finances implies an understanding and control of earning, spending, borrowing, and saving.

EDUCATIONAL AWARENESS

Personal values relate to lifestyle.

BEGINNING COMPETENCY

Tools and processes used in research in the physical and social sciences can be mastered. A variety of tools is used in the different occupational clusters.

EMPLOYABILITY SKILLS

Social and personal relationships have an effect upon employment.

CAREER EDUCATION GRADE EIGHT

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

Perception of abilities and interests is related to career choice.

DECISION MAKING

The decision-making process is applicable to choice of careers.

ATTITUDES AND APPRECIATIONS

The impact of work upon one's life necessitates meaningful career choices.

CAREER AWARENESS

Occupational clusters draw upon specific areas of interest and ability.

ECONOMIC AWARENESS

The cost of entering a career relates to future expected income.

EDUCATIONAL AWARENESS

There is a relationship between lifestyle and educational achievement.

BEGINNING COMPETENCY

Basic tools found in the occupational clusters can be mastered.

EMPLOYABILITY SKILLS

Personal and social interaction skills are related to occupational success.

CAREER EDUCATION GRADE NINE

ELEMENT

BASIC UNDERSTANDING

SELF AWARENESS

A better perception of reality comes from an awareness of where one is as compared to where one would like to be.

DECISION MAKING

Career decisions can be analyzed and refined in the light of counseling, work experience, and new information.

ATTITUDES AND APPRECIATIONS

Occupational clusters draw upon specific attitudes and appreciations.

CAREER AWARENESS

An understanding of interests, values, and abilities is essential to a study of occupational choices.

ECONOMIC AWARENESS

Interpreting tables, graphs, and charts is important to the consumer.

EDUCATIONAL AWARENESS

A personal schedule assists in the acquisition of necessary and desired special skills.

BEGINNING COMPETENCY

Skills and processes can be matched with specific career clusters.

EMPLOYABILITY SKILLS

Specific skills are necessary to find and hold a job and to succeed in one's chosen occupational field.

With our increased attention to the current health issues of nutrition, environmental stress, drug and alcohol abuse, overpopulation, and the inequality of health care, the concern for the health of our children is perhaps greater today than ever before.

Health education of the school-age child supplements and reinforces efforts at home and in the community. This education for health represents a major challenge to our society. While the causes of many of today's health problems are known, and to a great extent preventable, we nevertheless find that children are unwilling or unable to make the proper choices for better health.

The emphasis in health education, therefore, must be in helping the pupil-learner make informed decisions about his or her health behavior. To be successful in this regard, children should be personally involved in defining their own goals and actions, while guided by parents and teachers toward evolving an acceptable means for achieving positive health behavior within their own framework of values, beliefs, and resources.

HEALTH EDUCATION

Such changes in behavior, to be long-lasting and practiced regularly, must be a personal decision. While there are many factors that enter into the decision-making process, our primary responsibility is in providing children with a body of knowledge as a starting point. The information contained in this publication is intended to assist in this learning process. Though it provides the basic health learnings for the district schools, it should be noted that other curriculum resources are available to help the classroom teacher in planning creative approaches to the health instructional program.

Health education can have a significant role in the school curriculum if recognized as an important means for achieving general human understanding and improving the quality of life. With support from the school and community, these worthy goals can be realized.

The library media program is a service, an instructional and management system shaped by the school's philosophy, its learning objectives, the characteristics of learners, teachers' skills, the curriculum, and the organization of the students for learning. The librarian's role is the implementing of this program so that learners can develop the ability to find, generate and apply information. The program provides:

- a systematic introduction to books, films, and recordings, and instruction in finding, analyzing and using information and creating new media;
- consultation services in the use of media resources, equipment, and facilities for the improvement of instruction;
- environments which foster the effective use of media resources, both human and material;
- production of materials created to meet specific needs of students and teachers.

The Library Media Center is a laboratory where the use of all resources is purposeful, planned and integrated with classroom teaching. Its use is intended to individualize instruction.

Although "library media" is not a subject area, it is related to all content areas. There are competencies and skills to be learned through repeated use of library resources in a variety of subject contexts. The four levels of development in the use of library media are sequentially:

- learning to use tools to locate materials
- learning to select material appropriate for the purpose and type of information needed
- learning various ways in which selected material can be used most effectively
- developing critical judgment in evaluating materials with regard to their suitability, accuracy, authenticity, bias and propaganda.

A complete skills program must include all four levels in each grade. The key to the success of the program is the integration of the teaching of library skills with classroom instruction. Attempts to teach skills in isolation may lead to student frustration and seriously impair the student's ability to use libraries independently and intelligently.

LIBRARY MEDIA

The mathematics curriculum involves the development of ideas and skills related to the areas of arithmetic, problem solving, measurement, geometry, probability, statistics, graphs, logical thinking and algebra.

The program is logical, systematic and developmental. The mathematics follows a spiral pattern in that the development of concepts and operations is repeated at increasing levels of difficulty.

In the primary grades, pupils manipulate, arrange and work with objects and other physical materials to observe relationships that can be symbolized in mathematical terms.

Beginning with collections of physical objects in the classroom, children move from non-verbalization to verbalization and symbolization. Operations are introduced with activities on sets of concrete objects. By exploration and play, children learn the number facts of arithmetic and the meaning of each operation in a concrete way.

At the same time that arithmetic concepts and skills are being developed, concepts from algebra, geometry, problem solving, and measurement are introduced. Children observe and later verbalize relations between numbers and their graphs on the number line. Fundamental operations with whole numbers, fractions, and decimals are developed gradually. Experimentation and discovery are methods used to help pupils develop an understanding of important properties of our number system, properties of geometric figures, and measurement ideas - both metric and customary.

In the intermediate and junior high school years, the scope of mathematics content is broadened to include more geometry, arithmetic, probability, and algebra. The students come to understand mathematics as a unified whole by perceiving interrelationships among concepts, skills and knowledges. They learn to apply the various branches of mathematics to science, industry, career and consumer education and citizenship. They come to appreciate mathematics as an indispensable tool for living in our technological society.

One of the reasons for the growth of music education has been the recognition of the important role that music plays in the life of the child. Through musical experiences the child grows in self-understanding, self-awareness and self-expression. Music is an area of the curriculum that is concerned primarily with subjective responses and affective growth.

Music as a spectator activity is rapidly diminishing. Children want more out of music than simply being a spectator on the sidelines. They want to "do" music. They want to make music with their voices; on a drum, guitar, steel drum, recorder, clarinet or any musical instrument.

MUSIC

Making music is an important form of individual expression; listening to music is a vital aspect of a more meaningful inner life. It is the school's responsibility to provide children with the opportunity and means of developing their natural musical talent to the utmost. They should be given the opportunity and the means to share in the making of music, alone, and in groups. They should be provided the atmosphere in which to appreciate the musical contributions of all people and to share in the wealth of the world's musical literature.

Music education must reach out to meet the needs of all children, from the serious music student to the child who wants only to enjoy music. Those for whom music has become a source of personal satisfaction become living testimonials to quality music education.

The goal of physical education is to provide children and youth with regular, planned, vigorous physical activities on a daily basis which will serve to promote physical fitness and cardiovascular efficiency and help to prevent heart disease. Additional benefits of physical education include socialization in a guided setting, an improved self-image, recognition of the talented and gifted student of dance, sports and gymnastics, and opportunity for the development of interests and leisure-time activities.

There is evidence that children perform better physically once they understand the concepts of movement. Therefore, movement education is essential in the elementary school grades. It is ideal for developing awareness of space, direction, pathways, levels, body parts and uses, manipulative skills, locomotor and non-locomotor skills. It offers experiences for individual performance, devoid of the constraints of group competition. In grades K-4, there is a stress on movement skills and activities such as song plays, rhythms, dance, simple stunts and games which reinforce and enhance movement concepts. In grades 5-6 movement concepts are reinforced and applied in stunts and tumbling, apparatus, team and individual sports, dance, and physical fitness. In grades 7-9 there is an even greater emphasis on participation in a variety of games, sports, dances, gymnastics, martial arts, and physical fitness which may serve students as lifetime activities and interests.

All activities are geared to both boys and girls in a coeducational setting, and are adaptable to the needs and interests of special (handicapped) students, as required by recent legislation.

It is expected that both classroom teachers in the elementary schools and physical education specialists in grades K-9 will be able to utilize the Minimum Teaching Essentials and the new curricula on which they are based.

PHYSICAL EDUCATION

SCIENCE

In these times of great scientific advancement and opportunity, we are increasingly dependent upon a scientifically literate population. Our young people must be guided to explore, to discover, and to understand the scientific concepts which will be of value to people in a changing world. Science meets the needs of all pupils since it offers them endless opportunities to explore, to manipulate, and to discover as they strive to find the what, how, and why of the world around them. The pupil-oriented laboratory science program is designed to provide a variety of experiences in the form of laboratory investigations, demonstrations, trips, and projects which will appeal to all children of varying backgrounds and interests.

The design of the science program provides a set of basic experiences and instructions for which all pupils are responsible. Pupils are frequently exposed to familiar objects as a basis for study. New ideas, laboratory skills, and science vocabulary are introduced at a pace which permits easy assimilation. Understandings and interrelationships are constantly reinforced through frequent referral to previous studies. In addition, lessons and units contain concrete suggestions for stimulating a more in-depth study by providing extended enrichment studies for students whose interests and abilities warrant them.

The science content combines the two components of science instruction: process and knowledge. To accomplish this, the following approaches have been used in teachers' guides.

There has been a greater stress on the important concepts underlying each of the disciplines of physics, chemistry, biology, and earth science, and the interrelationships among them.

Laboratory investigations and experimentation have been integrated into the science lessons where student involvement would make the greatest impact. There has been a greater emphasis on critical thinking, investigation, and problem-solving as ways of learning.

The curriculum in history and the social sciences has been guided by several major considerations. These may be summarized as follows:

It emphasizes the teaching of concepts rather than the accumulation of data. The curriculum has been predicated on the same theory of learning that inspired recent changes in the teaching of science and mathematics. Instruction should focus on the development of critical thinking. The student must learn to "think as a scholar" -- to search out and deal with authentic source materials, to use techniques of inquiry and discovery, and finally, to arrive at conclusions supported by evidence.

It seeks to provide all students with the values, skills, understandings, and knowledge needed to cope with the pressing social problems of our age. We live in an era of change and challenge, a time when new and complex forces are reshaping our society. Students must recognize the sources of change and be prepared to deal effectively with issues raised by change. They must also strengthen their commitment to democratic values.

It attempts to incorporate basic concepts drawn from the disciplines of history and the social sciences. Each discipline offers a set of basic concepts variously known as "key ideas," understandings, or generalizations. These concepts provide a structure around which learning may be organized within each grade.

It attempts to develop skills and research techniques sequentially. The curriculum provides important tools for analysis and encourages the use of objective, rational methods in the study of contemporary problems.

SOCIAL STUDIES

SOCIAL STUDIES

It attempts to provide learning activities that aim at conceptualization through techniques of inquiry and discovery. Probing discussion questions, careful analysis of primary source materials, case studies of concrete social phenomena, the use of contrasting evidence to underscore man's varied social responses -- these and other strategies are used to obtain pupil interest and to develop understandings.

No one method, however, is mandated. Children learn in many different ways. The learning process justifies a variety of techniques or strategies and a wide range of teaching materials.

It emphasizes the use of multimedia resources rather than the traditional textbook. Especially useful are the audiovisual materials of instruction -- motion pictures, filmstrips, maps, globes, transparencies, 8 mm. single-concept films, programmed instruction, records, tapes, pictures and other non-book resources.

Work study skills are those which students require in order to study, to work in class individually or in small groups, to do homework assignments and independent research projects, and to find information for purely personal needs and interests. These skills are used in all subject areas and are developed in a continuum. For example, a kindergarten child finds a picture file of farm animals and selects a cow to illustrate a story. An eighth grader uses the Readers' Guide to Periodical Literature to obtain articles on environmental pollution in N.Y.C. Both are locating and selecting information, just as a student following verbal instructions for setting up a terrarium and a student reading directions on a mathematics test are both using the skill of following directions.

In this bulletin work study skills used in all subject areas are presented for each of three levels, K-2, 3-5, 6-9. The skills are grouped in five categories: following directions; locating information; selecting, recalling, and evaluating information; organizing information; and using graphic representation and investigative tools.

WORK STUDY SKILLS

In addition, there is an emphasis on applying these skills to multimedia sources of information. We live in a world rich in communications media. Students need to be guided in developing responses, both to the information received and the effects of different media on the information presented. To do this students must be given opportunities for comparison and contrast.

The library-media center provides the means for meeting this need. Classroom teachers use the expertise of school librarians in cooperatively planning assignments which incorporate library research and media skills. Teachers and librarians also work jointly in helping children learn these skills. But it is the classroom teacher who must provide the impetus and perseverance necessary for students to acquire these skills in sustained and consistent use.

It is the responsibility of all teachers to (1) provide assignments which, in total, require all the work study skills for that level (2) to analyze which specific skills are needed to complete a particular assignment and (3) to make certain those specific skills are taught as an integral part of that assignment in every subject area. For the skills which require use of library resources, librarians have the responsibility to consult with the teachers on how specific skills may be applied to the topics teachers plan to teach.

Communication Arts

LISTENING, SPEAKING, READING, WRITING GRADES K-9

Kindergarten	41
Grade 1	43
Grade 2	47
Grade 3	51
Grade 4	55
Grade 5	59
Grade 6	63
Grade 7	67
Grade 8	70
Grade 9	73

COMMUNICATION ARTS

Spoken and written language is the heart of the communication arts curriculum. The purpose of all language is to communicate. The speaker must speak so as to be understood; the listener must learn the skills of effective listening; the writer must develop the skills for communicating complex ideas; the reader needs all the complex skills necessary to absorb the written ideas of others.

In terms of education, increasing effectiveness in the four language processes -- listening, speaking, reading, and writing -- is based on two important premises:

When children arrive in school they already have achieved a degree of proficiency in at least one spoken language.

This ability is the beginning and the central tool for all learning which will ensue in the student's years of schooling.

As students mature physically and psychologically, their language skills spiral upward and outward together. The more words and ideas they can utter and understand, the more words and ideas they will be able to read and write.

In the early grades, children learn to appreciate and tell stories, decipher the code of writing, make phonic-graphic correspondence, and relate stories and ideas to their own thoughts and feelings. At the same time they grow in organizing ideas, using the structure of language, increasing vocabulary and learning the basic skills of spelling and penmanship.

By the middle grades, students are ready to apply their reading skills to content areas -- science, mathematics, social studies. They grow in sophistication, listening more perceptively, expressing themselves more articulately, and writing more fully and in greater depth.

In grades 7-9 students are gradually broadening their experience in a variety of literary genres, including selections from the past and present and familiar and foreign cultures presented in a range of styles and viewpoints. At the same time they are gaining skill in specific strategies for obtaining information in the content areas. They are also acquiring critical viewing and listening skills for appreciation and evaluation of film, radio, and television. In their oral and written communication students are ready to develop style and greater clarity of expression.

Thus, the goal of the communication arts is the development of language power so that students may engage effectively in communication with others orally and in writing, react perceptively to the spoken and written word, gain information from written and recorded materials, and understand the effects of communication on thinking and behavior. Ultimately, the goal is to grow in human understanding, in sensitivity, in responsiveness, and in creativity. At all times the student must be made aware that all the processes and skills taught in the communication arts curriculum are a means to this desirable end.

The Minimum Teaching Essentials in Communication Arts is divided into three strands:

Listening and Speaking stresses perceptive listening and effective oral communication.

Reading and Literature emphasizes reading as a means of gaining pleasure and information while developing necessary processes and skills.

Writing is presented as expressional and functional with the conventions of writing taught only as aids for the primary purpose of writing -- communication with a reader.

COMMUNICATION ARTS

The division of the curriculum into these strands is merely for ease of organization. In the classroom, listening, speaking, reading literature or content area materials, and writing are integrated in the learning experience.

This approach is holistic and ongoing. While the skills and knowledge presented at a grade level constitute the minimum which should be taught before children leave that grade, it does not mean that the same skills and knowledge may not be taught earlier or later. Language develops along a continuum and teachers are responsible for learning opportunities which engage the individual child, whatever his or her point on the continuum. Throughout the years of a child's education, learning in all strands of communication arts grows in depth and complexity as the child grows in confidence and maturity.

COMMUNICATION ARTS KINDERGARTEN

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Listening is preparatory to developing a discriminating ear for the sounds and patterns of language. *pp. 40-2
Listening to stories develops an acquaintance with literature of the past and present. *pp. 53-54
Listening to stories develops knowledge of the structure of stories. *p. 54
Listening develops skill in identifying main ideas and sequence of events, and in understanding simple cause-and-effect relations. *pp.48-50
Language is a code for expressing ideas. *p. 71
Word order conveys meaning. *p. 72
Ideas can be expressed through speaking. *p. 64
The art of clear, pleasant, audible speech is developed gradually. *p. 66
Personal narratives follow a chronological order or a simple cause-effect relationship. *pp. 66-68
Informal modes of communication (e.g., conversation, discussion, creative dramatics) can lead to a sharing of ideas and thoughts. *p. 66
Questions generally require appropriate responses using full or part sentences. *p. 18
Social amenities (such as "please" and "thank you") are important.

READING AND LITERATURE

PLEASURE AND INFORMATION

Literature gives pleasure. *p. 30
Literature improves self-understanding. *p. 52
Literature aids in understanding the behavior and values of others. *p. 52
Illustrations aid in understanding the literature. *p. 337

*Handbook for Language Arts: Pre-K, Kindergarten, Grades One and Two (Curriculum Bulletin, 1965-66 Series, No. 8)

** Sequential Levels of Reading Skills: Pre-Kindergarten--Grade 12 (Curriculum Bulletin, 1967-68 Series, No. 4)

Page references provide amplification or identify the source of the particular item and show related materials.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Stories

A story has a set structure with a beginning, a middle and an end. *p. 52
 Real-life characters are different from "make-believe" characters. *p. 52
 Stories are varied in type and include the following: folktales, Bible stories, animal stories, nature stories, and stories about people, places and things. *pp. 578-79
 Stories have different types of settings, varying in both location and time. *p. 52

WRITING

CREATIVE AND FUNCTIONAL

Pupil-dictated stories or group stories express feelings and describe experiences. *p. 70
 Drawings and paintings express reactions to literature. *p. 70
 Drawings and experiences are a base for learning oral and written phrases and sentences. *p. 70

WRITING CONVENTIONS

Handwriting

Practice in handling tools and materials develops dexterity and control. *p. 70
 Writing proceeds from left to right. *p. 70
 Drawings and possessions are identified by writing one's name in manuscript form. *p. 70

COMMUNICATION ARTS GRADE 1

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Meaning is obtained through listening. *p. 77
Having a reason for listening aids in comprehension. *p. 78
Listening to simple directions develops a sense of order. *p. 90
Listening to stories develops skill in identifying main ideas and details and sequential order, and in recognizing implied ideas. *p. 86.
Teachers' names and classmates' names are appropriate forms of address. *p. 126
Conversation is the spontaneous informal sharing of thoughts with the teacher and other pupils. *p. 126
Telling favorite or original stories or incidents provides opportunities for sharing ideas orally. *p. 128
Formal modes of communication (announcements, prepared statements, individual and committee reports) can lead to the sharing of thoughts and ideas. *p. 127
Ideas may be expressed in different sentence patterns. *p. 153
Intonation pattern is a clue to meaning; variations in voice show feeling and emotion. *p. 80
Asking questions is a way of communicating a need. *p. 126
Creative dramatics and puppetry stretch the imagination and help to interpret experiences. *p. 129
Oral reading by teacher and pupils demonstrates how phrasing, stress, pauses, and intonation affect meaning. *pp. 117-118
Choral speaking contributes to effective interpretation of poetry and the enjoyment of language. *p. 212
Voice production and enunciation require awareness and practice. *p. 80

READING AND LITERATURE

PLEASURE AND INFORMATION

Literature is language at its best. *p. 91
Literature evokes many different emotional responses -- humor, grief, excitement, wonder, anger. *p. 92
Libraries are the depositories of many different kinds of information and literature to be found in books and other media. *p. 94

*Handbook for Language Arts: Pre-K, Kindergarten, Grades One and Two (Curriculum Bulletin, 1965-66 Series, No. 8)
**Sequential Levels of Reading Skills: Pre-Kindergarten -- Grade 12 (Curriculum Bulletin, 1967-68 Series, No. 4)

Page references provide amplification or identify the source of the particular item and show related materials.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Stories

A plot unfolds through a series of episodes leading to a logical conclusion. *p. 380
Characters behave in ways which are believable. *p. 381

Biography

Stories are written about the lives of real people. *p. 380

Poetry

The enjoyment of poetry is extended through reading aloud and listening to others recite. *p. 372

Exposition

Factual materials give useful knowledge about the world.

PROCESSES

Following skills generally applicable to content areas, as well as to literature

Comprehension

Literal

Details in a series of connected sentences may tell about the characters, setting, time, place or plot. **p. 24
Details relevant to the main idea of a selection can be found in illustrations, titles, and captions. **p. 6
The main idea of a selection may be expressed in one or more statements. **p. 6
Sequence is the chronological order of events in narratives**p.28

Inferential

An idea which is not directly stated must often be inferred**p.6

Critical

Some stories or poems may be more enjoyable than others to individual pupils.
Stories may be real or make believe. **p. 6

Alphabet Knowledge

Each letter of the alphabet, both upper and lower case, has a name. **p. 8

Auditory Discrimination

Words have distinguishable sounds. **p. 5

Visual Discrimination

Words have distinguishable gross and fine differences. **p. 4

COMMUNICATION ARTS GRADE 1

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Phonic Analysis

(For more detailed information on the various phonemes see the tables appended to this bulletin.)
For each single consonant there is a sound-symbol relationship. Single vowel letters have short (unglided) and long (glided) sounds (phonemes).
Some consonant letters may be combined with other consonant letters to form a consonant blend.
Some words have similar combinations of letters and similar sounds (word families).
New words can be formed by substituting new phonic elements for known elements.

Word Meaning

Vocabulary Development

A limited number of words may be recognized by their shape (configuration) as sight words. **p. 8
Words which do not convey meaning (function words) can be recognized on sight, e.g., the, but, for. **p. 8
Words may have synonyms or antonyms. **p. 8

Contextual Clues

Word meaning may be obtained from the sense of the sentence and/or the surrounding sentences. **p. 22

Structural Analysis

A root word (free morpheme) is the base to which other words or word parts may be added. **p. 18
Words may have plural endings. **p. 16
Words may have inflected endings (s, ed, ing). **p. 16
Compound words are formed by combining two root words each of which contributes to the meaning of the new word.
**p. 16

WRITING

EXPRESSIONAL AND FUNCTIONAL

Writing may record or express thoughts and needs. *p. 131
Anecdotes and incidents based on individual and class experiences are the bases for written expression. *p. 133

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

EXPRESSIONAL AND FUNCTIONAL

Ideas may be expressed in different sentence patterns. *p. 153
Practice in composing can be the result of cooperative and/or individual dictation. *p. 133

WRITING CONVENTIONS

Taught as needed in actual writing, NOT as isolated skills

Sentence Sense

Word order may establish meaning. *p. 153

Punctuation

Every sentence begins with a capital letter and has a final punctuation mark. *p. 136

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences. *p. 176
The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.

Usage

Variations in usage patterns are acknowledged. *p. 155

Developing communication is stressed, rather than correct usage.

Handwriting

Manuscript writing looks very much like print. *p. 160-175
Manuscript letters, composed of upper and lower case, require only two basic strokes; a circle or parts of a circle and straight lines. *p. 160

COMMUNICATION ARTS GRADE 2

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

A variety of listening activities broadens the speaker's oral vocabulary. *p. 272

Listening develops skill in selecting main idea, comparing and contrasting details, recognizing sequential order and cause and effect relations. *pp. 189-194

Vocabulary growth enhances the ability to express ideas clearly and effectively. *p. 269

The language deemed appropriate at school may be different from the language of home and community. *p. 275

Discussion is the method by which ideas are expressed freely and attention is given to other points of view. *p. 232

Formal modes of communication (announcements, invitations, prepared statements, performed drama, individual and committee reports) can lead to the sharing of thoughts and ideas. *p. 236

Comparison and examples are used for clarification. *p. 258

Oral reading requires understanding, phrasing, stress, clear enunciation, and dramatic quality. *p. 222

READING AND LITERATURE

PLEASURE AND INFORMATION

Literature is read to broaden horizons and to gain insight into basic human values. *pp. 195-197

Literature develops critical thinking and imagination for deeper interpretation.

Literature leads to greater knowledge of oneself.

Literature leads to an understanding of other cultures.

Literature read aloud increases pleasure and helps to interpret textual ideas. *pp. 222-223

Literature is the work of individual authors and illustrators. *p. 196

Stories

Folk Tales

Each separate culture has its lore of tales transmitted over a long period of time. *p. 378

*Handbook for Language Arts: Pre-K, Kindergarten, Grades One and Two
(Curriculum Bulletin, 1965-66 Series, No. 8)
**Sequential Levels of Reading Skills: Pre-Kindergarten--Grade 12
(Curriculum Bulletin, 1967-68 Series, No. 4)

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Fairy Tales

Fairy tales are folk tales that describe beings with magical powers: fairies, giants, trolls. *p. 378

Animal Stories

Animal stories frequently employ animals who have human characteristics and often show us how to behave. *p. 379

Biography

Biographies relate the lives of real people. *p. 380

Poetry

Poems use words creatively and have a singing quality. *p. 372
Poems offer vivid descriptions of nature and human feelings.

Exposition

Factual materials give useful knowledge about the world.

PROCESSES

Following skills generally applicable to content areas, as well as to literature

Comprehension

Literal

Details may express similarities and differences. **p.27
Titles generally relate to the main idea or subject of a selection. **p.24
The sequence of events of a reading selection may follow a logical order. **p. 28
Cause and effect relation may be clearly stated. **p. 6
The main idea of a selection may appear in various positions in a selection. **p. 24

Inferential

The main idea of a selection may be inferred from the cumulative details of that selection. **p. 30
A series of events may be predicted by reviewing sequence and cause-effect relations. **p. 6
Conclusions concerning actions, characters, outcomes, themes, and plot development may be drawn from logical inferences. **p.6

COMMUNICATION ARTS GRADE 2

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Critical	Selections may express authors' opinions or statement of fact. **p. 34
<u>Word Meaning</u>	
Vocabulary Development	Content area materials are source for expanding sight vocabulary. **p.8 Homonyms are words that have the same sound but are spelled differently and have different meanings.
Contextual Clues	Words may have multiple meanings. **p. 22 Content area words are added to vocabulary study. **p. 9
Structural Analysis	An apostrophe may be used to show possession. **p. 16 A contraction is a short way of writing two words. **p. 18 An apostrophe is used to show the omission of one or more letters. **p. 16 Some inflectional endings (s, ed) may vary in sound. **p. 16
<u>Alphabet Knowledge</u>	The letters of the alphabet are arranged in sequence.
<u>Phonic Analysis</u>	(For more detailed information on the various phonemes see the tables appended to this bulletin.) For each single consonant letter there is a corresponding phoneme (sound) relationship in the initial and final position. Some consonant letters are combined to form a single sound referred to as a consonant digraph. The consonant letters <u>r</u> , <u>w</u> , and <u>l</u> affect the sound of immediately precedent vowels. The consonant letters <u>c</u> and <u>g</u> have both a hard and soft sound. The letter <u>y</u> and the endings <u>ed</u> and <u>d</u> have more than one sound. Some consonant letters and consonant blends have variant sounds (voiced and unvoiced.) Some consonant letter combinations have silent letters. Some vowel letters are placed together to represent a single sound called a digraph. Some vowel letters are placed together to blend their sounds into a new sound called a diphthong.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

WRITING

There are two main types of writing: expressional and functional.

EXPRESSIONAL AND FUNCTIONAL

Expressional writing conveys one's thoughts, ideas, and feelings. *p. 240
Functional writing includes factual writing: simple letters, reports, messages. *pp. 263-6
Writing letters is a method of sending a personal communication to others. *p. 263

WRITING CONVENTIONS

Taught as needed in actual writing, NOT as isolated skills

Sentence Sense

A sentence is a group of words belonging together. *pp. 273-5
Some sentences make statements; others ask questions. *p. 273

Usage

The past tense of regular verbs ends in ed, but many common verbs (see, go, buy, do, take) have irregular endings. *p. 276
Sentences begin with capital letters and end with periods or question marks. *pp. 242-246
Exclamations end with exclamation points.
The pause in speaking corresponds to punctuation marks.*p.273

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences. *pp.289-290
The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.

Handwriting

Manuscript writing becomes more precise and smaller in size. *p. 287

COMMUNICATION ARTS GRADE 3

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Listening to stories develops skill in identifying main ideas and details, sequential order, understanding cause and effect relations, and drawing conclusions and predicting outcomes. *p. 20-23
Hearing may be passive and involuntary; listening is a voluntary activity. *p. 23
Language is spoken on two levels of usage -- formal and informal. Each is appropriate to a given situation. *pp. 138-139
An interview with another person is a way of obtaining information. *p. 97
Oral reading with expression enhances enjoyment and comprehension. *pp. 79-80
Choral speaking contributes toward effective interpretation of poetry and the enjoyment of language. *p. 258
Original stories are based on experiences or imagination. *p. 103
A report is tied closely to a center of individual or group interest or curriculum area. *p. 99

READING AND LITERATURE

PLEASURE AND INFORMATION

Literature exists in print and other media. *p. 39
Literature exists in varying lengths and is often read in segments. *pp. 39-41
Literature is created in different genres, each having identifying characteristics, e.g., short story, novel, biography, drama, and poetry. *pp. 39-40
Individual authors may have written many books with similar ideas and/or locale and characters. *pp. 39-41

Stories

In addition to plot and character, stories have settings which express time-when and place-where. *p. 348

Poetry

The meaning of poetry is enhanced by an awareness of cadence, beat, and figurative language. *p. 52

*Handbook for Language Arts, Grades Three and Four
(Curriculum Bulletin, 1969-70 Series, No. 6)

**Sequential Levels of Reading Skills: Pre-Kindergarten--Grade 12
(Curriculum Bulletin, 1967-68 Series, No. 4)

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Exposition

Factual materials give useful knowledge about the world.

PROCESSES

Following skills generally
applicable to content areas,
as well as to literature

Comprehension

Literal

Stated details in content area materials may be isolated
as sub-headings in chapters or parts of chapters. **p. 27
The main idea of a selection may be directly stated in various
locations within the selection. ** p.24
Clue words such as first, next, and last indicate
sequential order of events. ** p.28
Clue words such as because and as signal cause and effect
relations. ** p.29

Inferential

Cause and effect relations not directly stated may be deter-
mined. ** p.31
Sequential order is a factor in predicting outcomes and draw-
ing conclusions. ** p.25

Critical

Experiential background and knowledge affect evaluation of
written materials. ** p.34

Word Meaning

Vocabulary Development

Vocabulary also expands through including content area words.
** p.9

Contextual Clues

Word meaning may be found from the context in a direct state-
ment, through a synonym or through apposition. ** p.22

Structural Analysis

A prefix comes before a root word and changes the meaning of
the word. ** p.18
A suffix comes at the end of a root word and changes the mean-
ing of the word. ** p.18
Comparatives and superlatives change the meanings of adjec-
tives, (er, est, more, most). ** P.18

COMMUNICATION ARTS GRADE 3

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Alphabet Knowledge

Letters of the alphabet have both a manuscript and cursive form. **p. 8

Phonic Analysis

(For detailed information on the various phonemes see the tables appended to this bulletin.)

WRITING

CREATIVE AND FUNCTIONAL

Careful observation of objects, places, people forms the basis for good writing. *p. 110

The realm of the child's private and fantasy world may become the subject for prose and poetry.

Factual writing is necessary to provide records. *p. 105

Logical development of ideas enables one to think and write clearly. *p. 104

Good writing requires revision. *P. 298

WRITING CONVENTIONS

Taught as needed in actual writing, NOT as isolated skills

Sentence Sense

A simple sentence is a group of words belonging together and conveying meaning. *p. 135

Usage

The subject of a sentence agrees with the predicate. *p. 140

Punctuation

Basic marks of punctuation: the comma, period, question mark, and exclamation point, bring more clarity to the written word. *pp. 134-135

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences. *p. 162

The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.

Words may be spelled according to a common structural element.

Regular plurals are formed by adding s. *p. 334

Regularly inflected verbs add s, ing, and ed. *p. 336

Words ending in silent e drop the e before adding ed and ing.

An apostrophe shows the omission of a letter or letters in a contraction. *p. 335

Handwriting

Letters of the alphabet have both upper and lower case in manuscript and cursive forms. *p. 155

COMMUNICATION ARTS GRADE 4

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Listening to various forms of communications reinforces comprehension.
Role-playing serves a variety of functions: understanding language and situations, expressing feelings, and illustrating ideas. *p. 264
Telephone conversation has specific conventions of answering: identification, clear message-giving, and brevity.*251
Reporting involves the use of an inviting opening sentence, vivid details and examples, organization, and clear delivery, and may be made by individuals or groups.*254
Memorization and recitation of poetry stimulate enjoyment and sensitivity to language and its patterns. *p.210-221

READING AND LITERATURE

PLEASURE AND INFORMATION

Novels

Well-developed characterization depends on the degree to which characters are true to life. *p. 348
Historical fiction deals with historical events and real or fictional characters. *p.345

Biography

Biographies may provide insights into the historical period.*347

Poetry

In poetry the poet varies the sequence for emphasis. *p. 350
Poetry makes wide use of comparisons (metaphors and similes)*p.350
Poetry uses repetition of sounds (assonance, alliteration, rhyme). *p. 350
Poetry employs words where the meaning is suggested by the sound (onomatopoeia). *p. 350
Free verse is poetry without regular rhyme or meter. *p. 351
A popular form of unrhymed poetry is Japanese Haiku, a poem of seventeen syllables divided into three lines of five, seven, and five syllables. *p.294

*Handbook for Language Arts: Grades Three and Four
(Curriculum Bulletin, 1969-70 Series, No.6)

**Sequential Levels of Reading Skills: Pre-Kindergarten--Grade 12
(Curriculum Bulletin, 1967-68 Series, No. 4)

Page references provide amplification or identify the source of the particular item and show related materials.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Exposition

Factual materials give useful knowledge about the world.

PROCESSES

Following skills generally
applicable to content areas
as well as to literature
Comprehension

Literal

Details may be used to support a point. **p. 26

Inferential

Details may be inferred from the context. **p. 31
Characters can be analyzed by their actions. **p. 30
Outcomes may be predicted based upon stated fact. **p. 30

Critical

Personal experiences may be related to a narrative or
expository selection. **p. 34
Fact and opinion may be distinguished based upon clue words
such as: in my opinion and I believe that. **p. 34

Word Meaning

Vocabulary Development

Vocabulary also expands through including content area words*9
Words evoke emotional and sensory responses. **p. 9

Contextual Clues

Word meaning may be found contextually through comparison
and/or contrast. **p. 22

Structural Analysis

Words of more than one syllable can be divided between the
syllables. **p. 20

Phonic Analysis

Should have been com-
pleted by this grade
except for individual
students who need
reinforcement

(For detailed information on the various phonemes see the
tables appended to this bulletin.)

COMMUNICATION ARTS GRADE 4

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

WRITING

CREATIVE AND FUNCTIONAL

A paragraph is a set of sentences of related ideas. In expository paragraphs there are generally a main idea (implied or stated) and supporting ideas. *p.272
An opening sentence is important in introducing the subject and arousing the reader's interest. *p. 273
Writing stories or reporting an event makes use of chronological order. *p. 274
Factual writing involves organizing and writing records, signs, labels, forms, directions, notes, reports. *pp. 269-70,80
First hand and vicarious experiences provide the material for journals, letters, and anecdotes. *pp. 272-3
Tales of fantasy, myths, fables or dreams may be the models for imaginative writing.
Revision is a means of improving one's original writing.
*pp. 299-301

WRITING CONVENTIONS

Taught as needed in actual writing, NOT as isolated skills

Sentence Sense

Simple sentences may be expanded to form compound sentences joined with and or but. *p. 306

Punctuation

A comma is usually needed before and or but when used to join compound sentences. *p. 306

Usage

To improve style, pronouns may be substituted for nouns. *p.341

A pronoun agrees with its antecedent in number and gender.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences. *p.368
The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.
Some plurals are formed by adding s, es, changing y to i and adding es. *p. 327
Some word roots change when plurals are formed (irregular plurals such as foot, feet).
A word ending in a single consonant following a single vowel doubles the consonant for an inflectional ending (run, running). *p. 229
A word of more than one syllable can be divided between its syllables. *p. 324
Common abbreviations exist for days, months, titles, and measurements.

Handwriting

Cursive writing is the conventional form of script in which letters are joined and words separated. *pp. 316-20

COMMUNICATION ARTS GRADE 5

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Listening is a means of appreciating the mood of a selection***12
Listening critically is a means of evaluating content of
written materials. ***p. 11
Listening to various forms of written communications rein-
forces comprehension. ***p. 155
Effective discussion has purpose, direction, and opportunities
for participation by all. ***p. 17
Volume, pitch, rate, and quality of voice are appropriately
varied to occasion. ***p. 7
There are standards for pronunciation and articulation suit-
able for different occasions. ***p. 8
Choral speaking contributes toward effective interpretation
of poetry and the enjoyment of language.

READING AND LITERATURE

PLEASURE AND INFORMATION

Common emotions and aspirations unite all people. *p. 224
Cultural differences exist among people; these should be under-
stood and respected. *p. 155

Novel, Short Story, Myths

The plot may develop in a straightforward chronological
manner. *p. 241
The hero and the villain of the piece of literature are iden-
tified by their characteristics. *p. 241
The setting (time and place) of the story is important in its
relation to the story. *p. 241
Characters' traits and actions may be evaluated in terms of
ethical values relating to the students' own lives.*p.222
Characters' strengths and weaknesses may cause them to
overcome or succumb to obstacles.
The motivation for characters' behavior must be sought in
terms of environment, personality, and society. *p. 223
The myths of all countries relate their histories, customs,
and beliefs. *p. 309

Handbook for English Language Arts: Grades 5-12
*Reading and Literature (Curriculum Bulletin, 1967-68 Series, No. 10)
***Speech and Composition (Curriculum Bulletin, 1969-70 Series, No. 21)
****Language Strand (Curriculum Bulletin, 1974-75 Series, No. 4)

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the source of a particular item and show related materials.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Drama

A play contains dialogue to interpret character and develop the components of plot. *p. 310

Biography

Biographies and autobiographies give insights into the subjects' lives and personalities, and may serve as role models. *p. 261

Poetry

Poetry employs words with musical quality. *p. 242
Onomatopoeia (sound of a word suggesting meaning) and alliteration (repetition of initial sounds) enhance the meaning and musical qualities of poetry. *p. 252

Newspapers, Journals, Speeches

Personal accounts supply authentic flavor.

PROCESSES

Following skills generally applicable to content areas, as well as to literature

Comprehension

Literal

Knowledge of literal meaning is applied to increasingly more difficult content and concepts. **p.25

Inferential

The literal meaning of a sentence can be expanded to include an extended meaning. **p. 31
Related ideas may be used to make generalizations. **p. 31
Outcomes may be predicted based upon facts not directly stated. **p. 30

Critical

Recognition of an author's purpose aids comprehension and evaluation. **p. 35

(Generally, these skills are integrated with reading for pleasure and information).

**Sequential Levels of Reading Skills: Pre-Kindergarten--Grade 12
(Curriculum Bulletin, 1967-68 Series, No. 4)

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COMMUNICATION ARTS GRADE 5

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Word Meaning

Vocabulary Development

Vocabulary also expands through including content area words. **p. 9
Language is constantly growing and changing. **p. 9
Many words have a specific history that can be traced back to their origins. **p. 9
New words are invented for new discoveries, ideas, and/or situations. **p. 9

Contextual Clues

Context aids in understanding words in technical and literary material. **p. 23

Structural Analysis

Dividing words into syllables may aid in decoding unfamiliar words. **p. 21

WRITING

CREATIVE AND FUNCTIONAL

Appropriately selected words provide clarity, vividness, and precision in context. ***p. 171
Variety in the use of language makes writing more interesting. Varied sentence types provide interest and fluency. ***p. 172
The paragraph contains an orderly and unified presentation of thought. ***p. 173
The basic paragraph requires writing of a moderate length. Paragraphs may be descriptive, narrative, persuasive or expository.
Individual statements on a topic must be related to each other. ***p. 173

Forms

The personal letter form includes the date, salutation, closing, and signature. ***p. 173
The envelope shows the complete return address and full name and address (including zip code) of the recipient. ***173

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

WRITING CONVENTIONS

Taught as needed in
actual writing, NOT
as isolated skills

Sentence Sense

There are different kinds of sentences: statements, questions, commands or requests, and exclamations. ***p. 172
Simple sentences can be joined by using such coordinating linking words as and, but and or.

Usage

Comparatives and superlatives of regular adjectives are formed by adding er and est. ****p. 15
Auxiliary verbs aid in forming tenses.

Punctuation

The sentence is to be distinguished from word groups and fragments and is punctuated by an initial capital letter and a final period, question mark, or exclamation point.***17
The hyphen is used to separate parts of a word at the end of a line.
The apostrophe is used to show possession. ***p. 268

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences. *p.215
The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.
There are certain words which have a regular spelling pattern.****205
Certain types of spelling errors persist because of reversals, omission of silent letters, mispronunciation, lack of emphasis on final sound. ****p.209

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Listening to various communications reinforces comprehension.
Listening critically is a means of evaluating content. ***p.23
Listening for essential points will help in focusing on
directions. ***p. 44
When speaking, the intonation and rising and falling of the
voice have a definite pattern. ***p. 19
Short talks before a live audience help to build poise and
confidence. ***p. 25
Improvising scenes from a play gives insight into character
and motivation. ***p. 51
Performing a role in a play demands skills such as pantomime,
body action, and appropriate voice modulation and effect.
Dialect and standard structures are compared and understood.
***p. 28

READING AND LITERATURE

PLEASURE AND INFORMATION

Short Story, Novel, Drama

The elements of plot can be identified. *p. 241
Characters in books may reflect the effects of their good or
bad environment. *p. 222
Characters in books help us to know ourselves and others more
accurately, develop a set of personal values, make judgments
independently, and take action accordingly. *p.250

Poetry

The emotional impact of poetry is heightened by the type of
rhythm employed. *p. 254
The rhyme scheme follows a regular or irregular pattern. *p.257
The lines of a poem may follow a regular stanza form such as
the couplet or quatrain. *p. 258
Poetry is made more vivid through the frequent use of
simile and metaphor. *p. 242
The choice of words and the sounds of the lines convey mood.*259

Handbook for English Language Arts: Grades 5--12

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***Speech and Composition (Curriculum Bulletin, 1969-70 Series, No.21)

****Language Strand (Curriculum Bulletin, 1974-75 Series, No. 4)

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CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Essay

The personal essay may express the author's sense of humor, way of thinking, or preferences. *p. 244

Newspapers, Journals, Speeches

Good reporting has authenticity and objectivity.

PROCESSES

Following skills generally applicable to content areas, as well as to literature

Comprehension

Literal

Knowledge of literal meaning is applied to more difficult content and concepts. **p. 25

Inferential

Sequential order may be inferred using logical reasoning and by placing details in their order of occurrence. **p. 29
Conclusions are drawn as a result of inductive and/or deductive reasoning applied to a paragraph or selection. **p.30
Recognition of cause and effect relationships serves as an aid in drawing conclusions and predicting outcomes. **p.31

Critical

Recognition of an author's point of view aids in understanding a selection. ** p.35
Materials can be evaluated for validity and accuracy. **p.35
(Generally these skills are integrated with reading for pleasure and information).

Word Meaning

Vocabulary Development

Many English words are derivatives of other languages. ***p.174
**p. 9

Contextual Clues

Punctuation may provide clues to word meaning, e.g., dash, parentheses, commas. **p. 23
Context clues aid in understanding words in technical and literary material. ** p. 23

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Structural Analysis

Identifying parts of a word can aid in defining the word:**p. 21

WRITING

CREATIVE AND FUNCTIONAL

Writing may be enriched by searching for vivid and precise words, using synonyms, antonyms, descriptive words and action words. ***p. 174

Words may have interesting historical backgrounds which give them special connotative value. ***p. 174

A narrative paragraph creates a sense of unity by telling of a single significant piece of action. ***p. 176

The descriptive paragraph achieves sensory effects through effective and selective words. ***p. 176

The simple expository paragraph of the "how-to-do" or "how to make" variety uses sequential order. ***p. 176

Letters to friends and family are an excellent way to communicate personal feelings and experience. ***p. 177

WRITING CONVENTIONS

Taught as needed in
actual writing, NOT
as isolated skills

Sentence Sense

Sentence kernels (basic sentences - simple subject and predicate) can be joined by using such subordinating linking words as when, as, since, although, and because.

There are basic sentence patterns, among them:

S-V (Subject - Verb)

S-V-O (Subject - Verb - Object) ****p. 18

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Usage

Don't and doesn't agree with their subjects.
The double negative construction, in which two negative words are used when one is sufficient, is considered non-standard form.

Punctuation

Use capitals for proper names, initials and abbreviations, and first word in salutation and closing of a letter.
A comma is used before and, but, or, nor, for, yet when they join simple sentences.
Capital letters are used for titles with a person's name, key words in titles of books, films, stories, poems.
Commas are used for words in a series.

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences. *p.206
The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.

Certain spelling errors persist because of confusion of homonyms, omission of silent letters, failure to double consonants, incorrect vowels, addition of letters.***209

Proofreading

Proofreading is a complex skill that involves the recognition of errors and the ability to correct them.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

LISTENING AND SPEAKING

Listening to various forms of communication reinforces comprehension.
 Good voice production includes respiration, phonation, resonance, and articulation. ***p. 31
 Accents may affect the pronunciation and meaning of words.
 Parliamentary procedure is an effective method of conducting a meeting involving set rules of order, voting, elections, and related activities and procedures. ***p. 40

LITERATURE AND READING

PLEASURE AND INFORMATION

The understanding of literature is a help in understanding oneself. *pp.224-5
 Personal values are clarified and strengthened by the wide reading of literature. *pp. 224-5
 Responsibility to the family unit is developed and reinforced by the study of literature. *p. 227
 Pathos, irony, and wit are elements which give emotional effect. *p.248
 Figurative language is used to highlight literal meanings. *p.254
 Propaganda can be recognized. *p. 100

Mythology

Mythological deities, folk heroes, and characters in stories and fables possess qualities which mirror human attributes, virtues, and frailties. *p. 309

Short Story, Novel

Stories and novels may be told through the eyes of the author (third person) or by a character in the story (first person). *p. 94
 The subplot is a method of enriching and supplying contrast to the main plot. *pp. 245-6
 The use of flashback is a method of plot development. *p. 245

Handbook for English Language Arts: Grades 5--12

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CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Poetry

Different speech sounds such as sibilants and plosives contribute to the overall effect of a poem. *p. 242
The rhyme may be organized in regular patterns: a-a, b-b, c-c, etc.; ab-ab; and the like. *pp. 254-7
Personification is a figure of speech in which human attributes are given to inanimate things or animals.

Biography

The author of a biography may present a personal or biased point of view about the subject. *pp.224-228

Essay, Articles

The story essay is a form often used to present a moral. *p.244
Informed opinion is the personal opinion of an expert in the field.
Objective reporting is factually oriented, complete, and avoids slanted words, propaganda, and a personal point of view.

PROCESSES

All the basic processes and skills of reading have been covered by the end of grade 6 for students on grade level. For students in grades 7, 8, and 9, advanced reading skills are best integrated into the teaching of literature and content area materials. This section is now referred to as Literature and Reading. For students reading below grade level, remediation should be planned for those skills in which students are deficient.

WRITING

EXPRESSIONAL AND FUNCTIONAL

Words have an emotive force. ***p. 178
Modifiers are placed as close as possible to the words they modify to enhance clarity.
New words -- some slang, some specially created -- keep language current and colorful.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Forms

In an expository paragraph the most important points come first, followed by the less important in rank order or vice versa. ***p. 179

Persuasive paragraphs may use some or all of the following: fact, opinion, authority, evidence.

The business letter form may be block or indented, containing the sender's address, the inside address, date, proper salutation, and closing. ***p. 180

Business letters should be clear, concise, and courteous. Persuasive letters should use the above devices and should avoid name-calling and abusive language.

WRITING CONVENTIONS

Taught as needed in actual writing, NOT as isolated skills

Sentence Sense

Effective sentences can include phrases and clauses. ***p. 178

There are basic sentence patterns, among them: S-V-IO-O

(Subject - Verb - Indirect Object - Object).

Subject and predicate agree in number and person.

Punctuation

Indentation marks the start of a new paragraph.

Quotation marks are used to indicate direct speech.

Usage

Parts of speech are identified by their position and form:

noun, verb, adjective, adverb, pronoun, determiner. ****p.33

Adverbs ending in ly and adjectives of more than two syllables are preceded by more and most in the comparative and superlative. ****p. 39

Spelling

Spelling Words List C comprises words most frequently used in student writing for that grade; new words are added from reading, content areas, and experiences.

The list is further supplemented by each student's individual bank of spelling words based on reading and writing needs.

ENGLISH AS A SECOND LANGUAGE

A successful method of teaching English to non-native speakers is through the audio-lingual approach. The pupils' first contact with the language is listening. They next practice what they have heard by repetition of language patterns and a variety of oral drills. At later stages, reading and then writing are introduced. Grade level curriculum specifies reading and writing objectives to be mastered by native speakers. Teachers of English as a second language (ESL) should know the objectives to insure that non-native speakers will also achieve these competencies.

The content of the curriculum at any level will depend on several factors: the age of the pupils, the duration of the ESL program, and the second-language ability of the students. There are usually three levels of instruction: beginning, intermediate, and advanced. Levels of instruction are necessary to insure that the language objectives are introduced in a systematic fashion. The reading, writing, and auditory objectives are also integrated into these divided levels and are arranged in a hierarchy of increasing difficulty. Teachers should review the scope and sequence in language arts K-9 in this bulletin to determine the specific skills and knowledges necessary for ESL students at various grade levels. Vocabulary will vary according to the sophistication and grade level of the ESL students. It is important to note that some students in grade level 6 may be beginning ESL students while others are intermediate or advanced.

A variety of topics must be mastered by all students. They include greetings, weather, emergency situations, etc. For example, students in all grade levels must master the patterns. My name is _____. I live at _____.

The following ESL scope and sequence will outline the topics, skills, and knowledge that should be taught. For specific examples of lesson plans and methodology, consult the Board of Education bulletins Handbook for Language Arts Pre-K-2 and Teaching English as a Second Language in the Middle Grades. Lessons in science, math, social studies and music may be found in the experimental bulletin Teaching English as a Second Language in The Elementary Schools.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

STRUCTURAL ANALYSIS

Articles

An and the, as used preceding initial sounds, are introduced.
An and a, as used preceding consonant and vowel sounds, are introduced.

Nouns

Nouns can be singular or plural, e.g., bank/banks, boy/boys, glass/glasses.
Some nouns are irregular, e.g., man/men; child/children.

Verbs

Am, is, are and regular verbs are used in the present tense.
Was and were and regular ed verbs in all terminal sound categories, e.g., walked, played, wanted, are past tense verbs.
To be going to _____ is a future tense pattern.

Subject Pronouns

I, you, he, she, etc. replace common and proper nouns in subject positions.

Demonstratives

This/these and that/those are used in declarative and interrogative sentences.

Object Pronouns

Me, him, her, it, them, us, you replace common and proper nouns in object positions.

Possessive Adjectives

My, your, his, her, its, our, their replace common and proper possessive singular and plural nouns in describing ownership.

Possessive Pronouns

Mine, yours, his, hers, its, our, theirs replace common and proper possessive nouns.

Questions

Do and does are used to ask and answer yes/no questions.
Who, what, when, where, and why are used in information questions with do, does, and to be.

BEGINNING ESL

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

STRUCTURAL ANALYSIS (continued)

The Negative

The negative is formed with the auxiliaries do and does and the verb to be.

READING

Alphabet

The same letters may have different sounds.

The Sentence

Sentences have a "doer" and a "receiver."
Sentences have meaning.

Paragraph

Paragraphs have main ideas and supporting ideas.

Punctuation

Certain marks of punctuation are essential to enhance better reading comprehension.

The period (.)

The comma (,)

The question mark (?)

Vocabulary

Some words are similar in two languages.
Student level and experience will determine the vocabulary taught.

AURAL-ORAL

*pp. 23-24

Directions

Teacher directions to students are important.

Illustrations

Identification of a picture from an oral word, oral action, phrase, oral descriptive sentence, brief oral paragraph demonstrates listening comprehension.

Consonants

Identification of consonants and consonant blends in initial, medial and terminal positions from oral words demonstrates that students hear these sounds.

Vowels

Identification of vowels in initial, medial and terminal positions from oral words demonstrates that students hear these sounds.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

AURAL-ORAL (continued)

Sequencing

Listing the sequence of events from an oral paragraph demonstrates that there is logical sequence of action and events.

Sentence Completion

Identification of a phrase which best completes an unfinished oral statement demonstrates knowledge of syntax.

WRITING

In grades 1-2 manuscript writing (printing) of the alphabet, familiar names, basic vocabulary; and in grades 3-6, cursive writing of alphabet, one-word vocabulary, phrases and sentences are motor skills.

Single words, sentences controlled orally and read with comprehension with attention to left-to-right movement, punctuation, spacing, and letter forms are copying skills.

Word, phrase, simple sentence writing of material controlled in oral production and the writing of dictated material within a student's auditory comprehension ability are dictation skills.

Periods or question marks are terminal punctuation. A sentence begins with a capital letter.

SPELLING

There is no definite spelling list. However, the students should be held responsible for the spelling of the words learned in class. An oral dictation of such words should be included in weekly tests. Consult specific grade spelling list.

INTERMEDIATE ESL

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

STRUCTURAL ANALYSIS

Nouns

Nouns can be count or mass. They are often used with HOW MANY and HOW MUCH, in both questions and statements. Proper, common and collective nouns are used in both questions and statements.

Nouns can show possession, e.g., John's.

Verbs

Regular and irregular past-tense forms tell about past events and actions.

Progressive (past and present) tenses use present participles.

The modals: should, would, could, may, might, shall, will, etc., can alter the meaning of verbs.

Adjectives

Adjectives describe and compare nouns and pronouns, e.g., simple, comparative - as...as, more...than, fewer...than, superlative - est, most...

Prepositions

In, on, at, near, off, by, under, etc. commonly used in phrases.

Pronouns

Indefinite pronouns replace nouns, e.g., some; any; every; with - body and - one.

Adverbs

Some adverbs are adverbs of place, e.g., there, here, far, near. Some adverbs are adverbs of time, e.g., then, now, before, after.

Expletives

There is, there are, there was, there were are used in both statements and questions.

Negative

The negative is used in both statements and questions.

Questions

Did is used with question words, e.g., how much? how many? which? and whose?

Question words how, who, what, where, when, whose, and why are used with different tenses.

INTERMEDIATE ESLCONTENT AREA AND TOPICSKILLS AND KNOWLEDGEREADING

Phonics

Use the same symbols that are used in Webster's dictionary to assist students in pronunciation.

Selections

All difficult or unfamiliar points of grammar should be taught as encountered in reading selections, and the students should be expected to remember them; e.g., the difference between hanged and hung; dragged and drug, etc.

Punctuation

Certain marks of punctuation are essential in order to enhance better comprehension of reading selections.

The period (.)

The comma (,) - Example:

"The President," said the governor, "had the right to veto the bill."

The President said the governor had the right to veto the bill.

Semi-colon (;)

Quotation marks ("")

Example: The "eye" saw the airplane through the clouds.
(Eye is in quotes because it refers to radar, etc.)

Vocabulary

Development of vocabulary depends on the sophistication and experience of the students.

Comprehension
(within time limits)

Culling information from reading selections under a time pressure helps in developing speed.

INTERMEDIATE ESL

CONTENT AREA AND TOPIC

WRITING

AURAL-ORAL

Sentence and Paragraph
Completion

SKILLS AND KNOWLEDGE

Commas are used to enhance meaning.

Sentence and paragraph writing of student ideas, emotional reaction, and creativity are developed through experience charts and guided writing activities.

Guided written responses to sequential, logical questions over a single topic create a written paragraph.

Writing on a familiar topic, which is controlled orally by the teacher, assists students in generating written compositions.

Continue using the drilling procedures.

Identification of a phrase which best completes an unfinished oral statement, oral paragraph or oral story demonstrates comprehension of the statement, paragraph or story.

CHILDREN'S NEEDS

Basic needs, the same for all children, are the drives that influence behavior. These needs include:

1. NEED TO BE VALUED

A child's self-image has top priority. A child can't be "somebody" unless the child is "somebody" to someone else. Self-image must be reflected in the eyes and actions of those the child loves and values. All children must be valued for who they are, where they come from, and what they bring with them from their culture, language, desires, and expectations.

2. NEED TO DO

Children learn by using all their senses to explore, discover, and form judgments about the things in their world.

3. NEED TO SHARE WITH PEOPLE THEY TRUST AND BE TRUSTED TO SHARE

Children need adults who care, who can guide the children's discovery into mutually respected action, who inspire and develop competence and confidence.

4. NEED TO BE GIVEN A CHANCE TO GROW AT HIS OR HER RATE IN HIS OR HER OWN WAY

Growth for children has many dimensions - social, emotional, physical, and intellectual. Growth is uneven and highly individual. All children do not reach the same level of growth at the same age, nor does a child grow in the same way in all areas.

PRINCIPLES OF GROWTH & DEVELOPMENT

Basic principles that enable persons to guide children with a degree of assurance include:

1. DIFFERENTIATION

Development proceeds from simple to complex. In both structure and activity, development is gradual in the direction of complexity and variety. Differentiated structures and functions become organized in new and more inclusive patterns.

2. DISCONTINUITY OF GROWTH RATE

Development is never uniform or all at the same time. Various parts and systems grow at various rates at a different time. Growth shows characteristic spurts or peaks and then slows down to periods of relative latency.

3. INTERRELATEDNESS OF GROWTH

Every aspect of the child's life affects every other aspect. The physical and social environment as well as factors of personality and physical development affect academic achievement.

4. DIVERSITY OF GROWTH

No two children are exactly alike. No two grow quite alike. Wide differences exist among children of the same age, the same family, and from the same community. Each child has his or her unique growth style.

OVERVIEW: Generally includes ages eleven to fifteen. Early adolescence is a period of rapid growth that transforms the child into an adult. It is the period in which the young person attains adult status, appearance and sexual maturity, in the physical sense. The adolescent develops formal or abstract thinking abilities.

PHYSICAL	SOCIO-EMOTIONAL	INTELLECTUAL..
<u>Eleven - twelve Year Old</u> • Wide variations in physical maturity occur. Girls are about two years ahead of boys in beginning the adolescent cycle of growth and tend to reach physiological maturity earlier; girls tend to be larger and stronger than boys of the same age. • Marked physical changes may affect their energy; the child may easily tire. • May show awkwardness in movement due to rapid muscular and skeletal growth • Team spirit is strong; child may enjoy vigorous games.	<u>Eleven - twelve Year Old</u> • Is restless and eager for activity, exuberant, outgoing and boisterous • Skills and boldness are admired. • Quarrels and makes up readily; responds to anger frequently and violently, physically and verbally • Similarity of interests and mental age increasingly influence choice of friends; has developed a strong loyalty to peers. • As puberty approaches, child may desire periods of aloneness and may show beginnings of shyness. • May have fears although may not admit it • Has a growing sense of humor	<u>Eleven - twelve Year Old</u> • Is capable of being absorbed in manipulative, constructive, and experimental activities • Ability to reason is on the increase, with an understanding of abstract ideas. Continued heightening of emotional susceptibility Can understand human reproduction more fully

PHYSICAL	SOCIO-EMOTIONAL	INTELLECTUAL
	<u>Eleven - Twelve Year Old</u> (cont.) . Has admiration for the more skillful. . Is critical of adults, yet tends to act politely, factually, seriously, honestly, and confidingly with adults.	
<u>Thirteen-Year-Old</u> . Is less awkward and angular . Boys approach girls in height. . Girls are still more physically mature than boys. . Has very high energy level . Muscular growth is rapid; restlessness may be a concomitant.	<u>Thirteen-Year-Old</u> . Is sometimes moody, withdrawn, and reflective . Has fewer friends . Sex consciousness may cause self-consciousness and shyness with opposite sex; however, the desire to tease appears as part of the sex attraction. Inner attitudes and tensions may be brought on by changes in body buildup and chemistry. . Often forms strong attachments to adults who show personal interest. Tendency to idol worship	<u>Thirteen-Year-Old</u> . Increases in critical thinking capacity . Is inclined to solve own problems; increasingly logical approaches to problems . Gains in memorizing ability

PHYSICAL	SOCIO-EMOTIONAL	INTELLECTUAL
<u>Thirteen-Year-Old (Cont.)</u> • Puberty cycle is still in progress; development of secondary sex characteristics continues. • Increases in height and weight may cause poor posture. • The heart may not develop rapidly enough to keep pace with unusual growth of body and limbs; fainting and dizziness may occur.	<u>Thirteen-Year-Old (Cont.)</u> • Conduct is influenced by the opinions of the group to which the boy or girl belongs. Attempts by adults to criticize their child's friend's qualities often intensify loyalties to the friend. Child may tend to reject parents or may feel rejected because of conflicts over behavior and authority relations.	
<u>Fourteen-Year-Old</u> • Girls are about two years ahead of boys at this age; sexual differences become more noticeable. • Posture is improving; general health is reflected in appearance. • Increased muscular development and resistance to fatigue make new skills and activities possible. More demanding sports may be played.	<u>Fourteen-Year-Old</u> • Is resentful of parental control; enjoys doing things independently • Group approval is of primary importance. • Expresses feelings freely; generally happy and friendly but does have short, explosive bursts of temper • Sexual manifestations may cause self-consciousness and, in turn, sexual delinquency may be caused by a feeling of non-belonging in the home.	<u>Fourteen-Year-Old</u> • Approaches crest of intellectual development, but judgment is far from mature • Uneven development occurs in various areas; the adolescent may be adult in grasping mental problems, yet remain a child in body and emotions.

PHYSICAL	SOCIO-EMOTIONAL	INTELLECTUAL
<u>Fourteen-Year-Old (Cont.)</u> Increased control over accessory muscles makes possible many new skills and refinements in previous skills		<u>Fourteen-Year-Old (Cont.)</u> - Concepts of natural laws and physical relationships are almost fully developed. - Ability to use formal logic is generally superior to experimental capacity. - Usually strives for outstanding performance.
<u>Fifteen-Year-Old</u> - May have achieved physiological adulthood - Continued improvement in muscular coordination - Puberty cycle is completed in majority of cases. - May have periods of glandular instability with fluctuations in energy level; ailments may include headache, nose bleed, palpitation, nervousness and acne.	<u>Fifteen-Year-Old</u> - Is intensely emotional while trying to understand social relationships. - Is more cheerful, friendly, outgoing; shows better control of temper and feelings - Parent-adolescent conflict is at its peak. Adolescent has tendency to respond more to the influence of a teacher than of the parent. Conformity to group may be stronger than conformity to parental controls. - Likes to be independent; shows a "know it all" attitude - Interest in and emphasis on physical attractiveness and good grooming may be at their height.	<u>Fifteen-Year-Old</u> - Generally thinks clearly and logically - Deals well with abstract problems - Can make use of capabilities, e.g., becoming discussion leaders, assuming increasing responsibility for school activities - Is more apt to think independently - Is intellectually serious

WORK STUDY SKILLS GRADES 6-9
ALL SUBJECT AREAS

Students acquire skills through using them consistently in assignments relating to the curriculum in each subject area. For skills which require use of library resources, librarians cooperate with classroom teachers on how specific skills may be applied to topics teachers plan to teach.

FOLLOWING DIRECTIONS

Taking notes from oral directions requiring several steps.

Applying pattern for following written directions

Reading title

Reading for overview

Rereading for specific steps

Carrying out steps

Checking for correct completion

Applying skills in following directions to situations that reflect real needs in outside world, e.g., admissions applications, job applications

Independently following complex directions which require research skills, e.g., finding books, articles, audio visuals on a topic, and evaluating appropriateness of sources

LOCATING INFORMATION

Interpreting and rephrasing questions; narrowing topics; selecting key words to aid in location of information

Using reference sources*

Dictionary

Encyclopedia

Atlas

Telephone Directory

Almanac

Current Biography

Readers' Guide to Periodical Literature

New York Times Index

* These are examples of commonly used sources; librarians will help plan which specific sources are best for a particular assignment.

[illegible]

Scanning for specific information; skimming for overview

Using format in print material

Table of Contents

Copyright date

Glossary

Index

Chapter, topic and subtopic heads

Bibliography

SELECTING, RECALLING, EVALUATING INFORMATION

Appraising sources for relevance and reliability

Refining skills in selecting and integrating significant information from multiple sources

Using organized study methods such as SQ3R

S - Surveys the chapter title, topic and subtopic headings to pick up the main ideas of the chapter

Q - turns each topic into a question

R - rapidly reads the material to answer questions

R - recites or recalls the answers to questions previously posed or to questions at the end of the chapter

R - reviews the material by constructing an outline for further study or by writing a summary

ORGANIZING INFORMATION

Refining skills in notetaking

Excerpting, classifying and/or categorizing more complex information from several sources in a variety of media

Analyzing and synthesizing data collected by scientists' tools

6	7	8	9
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WORK STUDY SKILLS CHART GRADES 6-9

Extending outline technique using sentence and topic forms; and 2nd level subcategories:

I.

A.

1.

2.

B.

1.

2.

Using footnotes; preparing limited bibliography

USING GRAPHIC REPRESENTATION AND INVESTIGATIVE TOOLS

Refining interpretation of more complex maps, charts, globes and tables

Manipulating more complex equipment in investigating problems.

Using a variety of measurements to investigate problems and support hypotheses

Constructing models of research designs

[illegible]

Grade 6

MINIMUM TEACHING ESSENTIALS

Art.....	82
Health Education.....	87
Mathematics.....	90
Music.....	94
Physical Education.....	95
Science.....	97
Social Studies.....	101

CONTENT AREA AND TOPICSKILLS AND KNOWLEDGEPAINTING

**pp: 9-10

Time: 9-12 Weeks

Color Qualities

Colors may be mixed directly on the painting surface.
 Colors are light and bright, rich and dark, or deep and subtle.
 Colors can run, swirl, melt, and flow.
 By variations of light, dark, and color a three-dimensional quality is expressed.
 Color choice can express mood.

DESIGNING IN TWO DIMENSIONS

*pp: 25-26

Time: 6-9 Weeks

Design and Craftsmanship

The crafts of other cultures afford examples of good design and craftsmanship.
 The function of an object often dictates its design.
 Basic concepts of design apply to simple techniques of weaving, knotting, and stitchery.

Weaving and Knotting

Knitted garments can be unraveled.
 A blunt needle and yarn are used to reweave the open spaces in burlap.
 The knotting of threads creates varied textures.
 Two sticks can serve as supporting frame for weaving yarn.

The Loom

Simple cardboard can serve as a frame for a loom.

CONTENT AREA AND TOPIC

DESIGNING IN THREE DIMENSIONS

**pp: 33-34

Time: 6-9 Weeks

Constructing with Paper

DRAWING

*pp: 3-4

Time: 9-12 Weeks

The Qualities of Line

SKILLS AND KNOWLEDGE

Pleating, crushing, folding, curling, rolling, and scoring change a piece of paper from a two-dimensional shape to a three-dimensional form.

Forms in three dimensions are created by joining and fastening materials together.

Three-dimensional forms penetrate and enclose space.

Paper forms are joined by slitting, weaving, and overlapping as well as by using glue or fasteners.

Patterns of dark and light are created by slitting or piercing surface of form.

Every part of a drawing is part of a design.

Drawn lines have direction.

Lines vary in size and direction.

Lines may express value, texture, and pattern.

The scale in drawings can be varied by using large sheets of paper, vertical or horizontal strips, or unusual proportions.

Details add interest to a drawing.

CONTENT AREA AND TOPICSKILLS AND KNOWLEDGEPRINTMAKING

**pp: 45-46

Time: 4-6 Weeks

Rubbing for Repetition

Printmaking is a process which duplicates images. The application of pressure with the side of a crayon to paper placed over a textured surface produces an image. By adjusting the object beneath the paper and repeating the process, a single object may be represented many times in a design. Cutouts from original designs or from magazines can provide shapes for rubbings. The application of a thin coat of paint to the cutout transfers the image to the rubbing paper.

LETTERING

**pp: 57-58

Time: 2-4 Weeks

Principles of Design

Simple tools are used in lettering. Letters and symbols are combined in designs. Individual letters are always legible. Cutout letters are used as stencils. Newspapers and magazines contain examples of different type-faces. Contrasting colors make signs attractive and visible.

Stroke and Spacing

Columns in newspapers, turned horizontally, provide guidelines for lettering. An alphabet is designed with a few basic strokes. Strokes are uniform. Letters are spaced visually with the goal of simplicity and legibility.

CONTENT AREA AND TOPIC

THE PUPPET PERFORMANCE

**pp: 65-66

Time: 4-6 Weeks

Simple Puppets and
the Puppeteer

SKILLS AND KNOWLEDGE

Dialogue evolves from the character of an expressive puppet. Original plays are written or stories adapted for the puppet stage.

The puppet's character, as well as the puppet's figure, is created by the puppeteer.

Simple lighting effects are part of the puppet performance. Puppets created at different times and places show great variety.

Puppeteers are hidden from the audience by the puppet stage. Finger puppets are miniature puppets whose costumes slip on and off fingers.

Fist puppets require lipstick or other washable medium to add detail to the face.

PHOTOGRAPHY

**pp: 75

Time: 4-6 Weeks

The Photograph and
Visual Perception

Picture taking is a process in which ideas and images are examined, selected, and rejected.

The viewfinder of camera expands the student's visual awareness.

Photography applies the principles of composition such as balance, emphasis, rhythm, tension, and movement.

Photographs stimulate visual perception.

Photographs are cropped to reveal the most interesting sections.

Photographs can be cut up and arranged to create feelings of imbalance or motion, humorous or bizarre effects.

Photographs can be enlarged.

CONTENT AREA AND TOPICSKILLS AND KNOWLEDGEFILMMAKING

*pp: 85-86

Time: 4-6 Weeks

The Art of Film

Filmmaking expresses a personal viewpoint in a contemporary medium.
 Film is an art form.
 Filmmaking imposes technical limitations.
 Filmmaking integrates the visual arts and other subject areas.

The Moving Image

Flipping pages of drawings whose figures have slightly changed positions can animate drawings.
 Moving images on film create an illusion of motion on the viewing screen.
 Magic markers can create lines, spots, and shapes on film that proceed from frame to frame while moving from one position to another when projected.
 The design on film is considered as a linear painting using variety, repetition, rhythm and space.

COSTUME DESIGN

*pp: 95-96

Time: 3-5 Weeks

Costuming and the Individual

Choice of clothing expresses individuality.
 Selecting and designing clothing presents opportunities to apply art concepts to a real situation.
 Costume designing projects the self image.

The Effect of Color

Fabrics exist in a wide variety of colors.
 Color in clothing has an effect on the appearance, mood, and personality of the individual.
 Some colors seem to exaggerate size while others seem to minimize size.
 Different people look better in different colors.

HEALTH EDUCATION GRADE 6

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

NUTRITION

*pp. 206-211

Food is used by the body for growth, repair of damaged cells, and the maintenance of body efficiency.
Nutrients are substances in food used to nourish the body.
The "Basic Four" food groups make it easy to plan a balanced diet.
Care should be taken in the preparation and preservation of food.

CLEANLINESS AND HEALTH PROTECTION

*pp. 201-206

People who live in communities are always faced with the threat of communicable diseases.
The community undertakes measures to prevent disease through a program of education, inspection, and disease control.
Building codes are established to safeguard health by establishing regulations for toilet facilities, plumbing, and sewage disposal.
The Environmental Protection Agency maintains a continuous program of education and analysis in order to control air and water pollution.
Good health is everyone's responsibility; resistance to communicable disease can be developed in many ways.
Eating well-balanced meals helps to keep us healthy.

DENTAL HEALTH

*pp. 211-214

Caries (cavities) of the teeth are caused by bacteria. Tooth decay and gum damage can be minimized or prevented by proper dental care.
Cleaning the teeth carefully helps reduce cavities and gum disease.
Using dental floss cleans food from between the teeth.
Visiting a dentist regularly is a valuable health practice.

MENTAL HEALTH

*pp. 215-219

Also see FAMILY LIVING INCLUDING
SEX EDUCATION

Children and parents strive continuously to develop a harmonious family unit.
As children mature they need to make and keep friendships.
This involves certain responsibilities.
It is important to learn how to handle both success and failure.

*HEALTH EDUCATION IN ELEMENTARY SCHOOLS

Curriculum Bulletin No. 2

CONTENT AREA AND TOPICSKILLS AND KNOWLEDGESAFETY AND FIRST AID*pp. 222-230

Automobile passengers sometimes contribute to accidents by distracting the driver.

First aid is defined as the immediate and temporary care given to a victim before the doctor arrives.

It is important to be able to recognize and treat traumatic shock.

One should be able to recognize a possible fracture and administer the proper first aid.

Artificial respiration is needed when a victim has stopped breathing.

A victim having a severe epileptic seizure may be helped by proper first aid.

Many children are injured or die from poisoning each year. Preventive measures and proper first aid can reduce the number and severity of these accidents.

Many people, particularly middle-aged and older persons, are subject to heart attacks. The first aider can be helpful if the proper action is taken.

EXERCISE, REST, AND SLEEP*pp. 232-236

A healthy, physically fit person gets the most out of life.

A person can achieve and maintain a high level of health and fitness if he or she participates in a program of daily vigorous activity.

By learning lifetime sports skills such as golf, tennis, and bowling early in life, a child is preparing for the continuation of fitness activity during the adult years.

Maximum fitness is achieved and maintained when regular, vigorous activity is balanced by an adequate amount of rest.

HEALTH EDUCATION GRADE 6

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

ALCOHOL, TOBACCO, DRUGS, AND
SUBSTANCE ABUSE

*pp. 236-241

Excessive drinking interferes with one's judgment and coordination.
All people do not react to alcohol in the same way.
Alcoholics and their families can obtain help from a number of organizations such as Alcoholics Anonymous and Al-Anon.
Young people begin to drink socially for many reasons.
Nicotine has various harmful effects on health.
Smoking is a difficult habit to break.
Under some conditions, marijuana use can become so unpleasant that panic results.
For some people, marijuana can be harmful.
Barbiturates are depressants which users take because of their intoxicating and sedating effects. Abuses of these drugs often cause serious social and emotional problems.
Barbiturate overdose occurs frequently. Withdrawal from barbiturates may lead to convulsions and death.
The inhalation of the fumes from chemicals such as airplane glue produces sensations resembling alcohol intoxication.
Inhaling volatile substances can be harmful to the brain, liver, and kidneys.
By developing regard for our physical, emotional, mental, and social functioning and well-being, we are less likely to harm ourselves through drug misuse or abuse.

HUMAN GROWTH AND DEVELOPMENT

*pp. 241-242

Also see FAMILY LIVING INCLUDING
SEX EDUCATION

Bodily changes that occur during puberty prepare girls and boys for adulthood.
In boys, puberty involves the growth of hair on the face and pubic areas, changes of voice, and maturation of the reproductive system.
In girls, puberty involves the growth of hair under the arms and in the pubic region, development of the breasts, the onset of menstruation, and maturation of the reproductive system.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

NUMBER: NUMERATION

*pp. 3, 4, 5, 7, 8

Place value concepts to millions; period chart
 Reading and writing five, six, seven-digit numerals
 Writing numerals using expanded notation
 $77,777 = 70,000 + 7,000 + 700 + 7$
 Estimating quantities
 Rounding whole numbers to the nearest hundred-thousand; to the nearest million
 Divisibility: 100,000 is divisible by 5
 Factors: 3 is the product of two factors, 3 and 1
 Decimal system of numeration: tenths; hundredths; thousandths
 Comparing and ordering tenths, hundredths, thousandths
 Renaming decimal numerals 1.2 as 12 tenths
 Reading and writing decimal numerals
 Expressing decimal numerals in expanded notation
 $.647 = .6 + .04 + .007$
 Rounding tenths to the nearest whole number

ADDITION AND SUBTRACTION
 OF WHOLE NUMBERS

*pp. 4, 13

Compute sums and differences involving any whole numbers less than 10 million
 Estimation and checking
 Verbal problems involving addition and subtraction
 Computation with dollars and cents

MULTIPLICATION OF WHOLE NUMBERS

*p. 9

Algorithm for multiplication:
 using multiples of ten and multiples of one thousand
 $10 \times 1000 = \square$
 $20 \times 2000 = \square$
 using a four, five, and six-place number as one factor
 and a two-place number as another factor

$$\begin{array}{r} 2356 \\ \times 23 \\ \hline \end{array}$$

MATHEMATICS GRADE 6

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Multiplication by 10; by 100; by 1000
 Verbal problems involving multiplication
 Estimation and checking
 Computation with dollars and cents

DIVISION OF WHOLE NUMBERS

*p. 9

Algorithm for division of four-place numbers by two-place numbers, long and short forms
 Estimation - checking for reasonableness of the quotient
 Division by 10

FRACTIONAL NUMBERS: COMMON FORM;
 DECIMAL FORM

*pp. 6, 7, 8, 9, 10, 11, 12,
 14, 17, 18

Concepts:

Meanings of fraction; equivalence; ratio
 Common denominator; least common denominator;
 Relationship between common form and decimal form

Procedures for:

Renaming fractional numbers

$$\frac{6}{8} = \frac{3}{4} \qquad \frac{1}{10} = \frac{10}{100}$$

Expressing fractional numbers in simplest form

$$\frac{6}{8} = \frac{3}{4} \qquad \frac{27}{8} = 3 \frac{3}{8}$$

Finding common denominator; least common denominator

Algorithms for addition and subtraction of fractional numbers with like and unlike denominators

$$2 \frac{1}{3} + 4 \frac{1}{2} = \square$$

$$6 \frac{5}{6} - 4 \frac{1}{2} = \square$$

Algorithm for computing products of fractional numbers and mixed numbers

$$\frac{1}{2} \times \frac{3}{4} = \square$$

$$1 \frac{3}{4} \times 2 \frac{1}{2} = \square$$

Algorithm for computing sums and differences using tenths;

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

hundredths; thousandths
 Algorithm for computing the product of:
 a whole number and tenths
 a whole number and hundredths
 a whole number and thousandths
 tenths by tenths $.3 \times .5 = \square$
 hundredths by tenths $.7 \times .21 = \square$
 Algorithm for computing the quotient of tenths and of
 hundredths by a whole number --

$$2 \overline{) .8}$$

$$4 \overline{) 24.88}$$

Estimation - checking for reasonableness of the sums, differences, products and quotients

MEASUREMENT

*pp. 8, 9, 12, 15, 17, 19

Linear:

Estimating length; measuring perimeter; measuring circumference
 Standard units - kilometer, meter, decimeter, centimeter, millimeter
 mile, foot, inch
 Relationships among standard units
 $1 \text{ mm} = 0.1 \text{ cm} = 0.001 \text{ m}$
 $1 \text{ m} = 0.001 \text{ km}$

Area:

Rectangle and square
 Standard units - square centimeter, square meter
 square foot, square inch

Volume:

Rectangular prism
 Standard units - cubic centimeter, cubic meter
 cubic inch, cubic foot

Weight:

Estimating weight
 Standard units - metric ton, kilogram, gram, milligram
 ton, pound, ounce

MATHEMATICS GRADE 6

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Relationships between standard units

2 kg = 2000 g

1 g = 1000 mg

Time:

Relationships: hour - minute - second

hour - day - year

rates: kilometers/hour; meters/second
miles/hour

Temperature:

Measuring temperature using Celsius and Fahrenheit
thermometers

Standard units - degree Celsius ($^{\circ}\text{C}$)
degree Fahrenheit ($^{\circ}\text{F}$)

Reading and writing temperature measurement

100 $^{\circ}\text{C}$ - boiling point of water

GEOMETRY

*pp. 9, 14, 15, 17, 19

Some properties of plane figures (circle, quadrilaterals)

Concept of rectangular region

Some properties of rectangular prisms, i.e. solids whose bases
are rectangles.

GRAPHS; STATISTICS; PROBLEM SOLVING;
PROBABILITY

*pp. 4, 14, 6, 8, 11, 12

Constructing, reading and interpreting line, bar and picture
graphs

Mean (average)

Deriving word problems relevant to the graphs

Determining the procedures needed to solve verbal problems

Translating verbal problems into mathematical terms (sentences)

Solving word problems involving the basic operations with
whole numbers, fractional numbers, decimals and units
of measure

CONTENT AREA AND TOPICSKILLS AND KNOWLEDGERHYTHM

*p. 15-18

Syncopation is an important element in jazz and Latin American Music. In syncopated rhythms the accent falls between the beats



or accents fall on other than the regular metric accent.

SINGING

*p. 20

The improvement of tone quality and intonation is an ongoing objective.

Singing intervals of fifths, thirds and fourths improves part singing.

The Kodaly method indicates a specific hand signal for each step of the scale.

Sing the first, third and fifth steps of the major scale together, produce the I chord.

LISTENING

*p. 52-54

Interdisciplinary

The listening experience and the visual arts experience are integrated to form an interdisciplinary experience.

Paintings, sculpture, dance, and music are related in form and expressive qualities.

INSTRUMENTAL MUSIC

Classroom music is the means through which musical talent is identified.

Musical instruments such as the clarinet, trumpet, violin, become part of the school orchestra or band.

Single instrument instruction (violin class, clarinet class) is a recommended instructional procedure.

CREATIVE

*p. 90-91

Sound scores are performed with musical instruments and classroom instruments.

Tape recorders with "sound on sound" features are an excellent creative musical tool.

Composing and improvising can be based on the pentatonic scale (five-tone scale).

PHYSICAL EDUCATION GRADE 6

<u>CONTENT AREA AND TOPIC</u>	<u>SKILLS AND KNOWLEDGE</u>
<u>SPORTS SKILL DEVELOPMENT</u>	
Basketball	Exploring passing over a greater distance, shooting with one hand, dribbling Discovering efficiency in these skills Refining skills: long pass, two-hand overhead pass, dribbling to a basket and shooting, one-hand shot, push-shot Applying skills to squad activities and lead-up games Knowing formations for drills -- single file, leader and group, parallel, and zigzag Knowing rules of lead-up games
Soccer	Exploring blocking and heading Discovering efficiency in these skills Refining skills Applying skills to squad activities and lead-up games Knowing formations for drills Knowing rules of lead-up games
Track and Field	Improving execution of standing broad jump Exploring throwing a softball for distance Discovering efficiency in throwing a ball for distance Refining skills of jumping for distance, throwing for distance and running Executing 50-60-100 yard dashes and 220-yard relay Refining visual baton pass for 220-yard relay Applying skills in squad activities -- pass it to me; measure my jump.
<u>GYMNASTICS</u>	
Stunts and Tumbling	Refining execution of log, forward backward and shoulder rolls Executing forward roll from a run, backward roll from a jackknife position, headstand to a forward roll, headstand with assistance
Apparatus: Balance Beam	Refining mounts and dismounts Executing one-knee mount, squat mount, jump straddle dismount, seat straddle, front scale and "V" seat Refining locomotor movements on the beam: Step-hop, skip, toe-touch walk, plie walk

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Vaulting Box

Refining mounts: Kneel mount, squat mount with hand support, standing mount
Refining dismounts: 1/4 and 1/2 turns, kneel and forward roll, swan jump-off
Refining vaults: Standing front squat vault (left and right side), front squat, vault and run

DANCE

Executing a variety of steps: walk, balance, hora (side step - hop run), polka, skip, grand right and left
Using steps in the formation of various patterns
Performing: all-American promenade, hora, jessie polka, maypole dance

PHYSICAL FITNESS

AAHPER Youth Fitness Test

Achieving physical fitness levels necessary to pass national and standardized tests: pull-ups, flexed arm hang, sit-ups, shuttle run, standing broadjump, (long jump), 50-yard dash, 600-yard run, 600-yard walk

Rope Jumps

Performing endurance jump: 150 jumps per minute
Performing speed jump: 45 in 10 seconds
Demonstrating coordination and agility; Cross rope forward and backward while jumping; execute double pass of rope under the feet on each jump

SCIENCE GRADE 6

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGES

LIVING THINGS AND THE ENVIRONMENT

*pp: 1-67, lessons 1-24
Time: 24 periods

Finding Out About the
Environment

The environment is composed of all living and non-living things that surround an organism.
The environment may change with place and time. The change may be sudden or gradual.
Light, water, air, temperature and soil are physical factors of the environment.

Perceiving the Environment

We perceive the environment through our five senses. Our senses are adapted in different ways to identify conditions in the environment.
We use many instruments to extend our senses and to make more accurate observations.
Measurements are ways of describing and communicating characteristics of an environment.

The Climate Affects
The Environment

Air is matter and therefore has weight and exerts pressure equally in all directions.
The ocean of air surrounding the earth is called the atmosphere.
The changes in the weather occur in the lower part of the atmosphere,
Air is a mixture of various gases and particles that are important to living things.
We use a variety of instruments to measure changes in the environment which affect weather-temperature, pressure, humidity, wind speed and direction and clouds.

*INVESTIGATING OUR ENVIRONMENT, Science: Grade 6, Experimental Edition, June 1974

SCIENCE GRADE 6CONTENT AREA AND TOPICSKILLS AND KNOWLEDGES

Other Environments

Climate is a condition of the environment over a long period. Living things that survive in an environment have developed different ways of adapting to the environment. Humans modify their environment by controlling the effects of the weather (heating, air conditioning and clothing).

Communities of plants and animals also live in aquatic environments. Living things have adaptations which enable them to survive conditions in aquatic environments.

INTERACTIONS IN THE ENVIRONMENT

*pp: 68-118, Lessons 25-45
Time: 20 periods

Life Activities

A study of many different organisms shows that all living things require food, oxygen and water, and suitable temperature range to survive. When changes are gradual, some species of living things may eventually adapt to the changed environment. In a balanced environment, there is a constant interaction among plants, animals and the non-living factors of the environment.

Interrelationships of Living Things

Living things depend on other living things for food. Green plants are the primary source of food for other living things. All living things have special adaptations for obtaining their food, moving about in the environment and protecting themselves from predators and the environmental conditions. Living things may also serve as an environment for other living things. The human body has developed many defenses against disease-producing organisms.

SCIENCE GRADE 6

CONTENT AREA AND TOPIC

The Organization of
a Stable System

SKILLS AND KNOWLEDGES

The interaction of the various populations in a community with each other and with the non-living physical environment make up a complete ecosystem.
Many factors affect the population of a community. They include food, water, sunlight and available space.
The interaction of the living things in the system results in a balance of nature. Changes in the balance result in competition and elimination of some parts of the ecosystem.

ENERGY IN THE ENVIRONMENT

*pp: 119-188, lessons 46-69
Time: 23 periods

The Sun is the Source of All
Energy

The measurement of energy from the sun may be accomplished by having students use a variety of science devices.
Conditions in the atmosphere affect the amount of sunlight reaching the earth.
Plants need sunlight to grow and make food.
Humans are affected by light in a variety of ways. The exposure may be beneficial at times or harmful at other times.
The energy that drives the water cycle comes from the sun.
The sun's energy that is stored on earth in the form of fossil fuels was once part of living plants and organisms. This supply is rapidly diminishing because of increased use.
Solar energy may be used directly as a source of heat and electrical energy.

Alternate sources of
Energy

In the future, scientists will look to other forms of energy including wind, moving water, tides, geothermal heat and atomic fission and fusion.

SCIENCE GRADE 6CONTENT AREA AND TOPICSKILLS AND KNOWLEDGES

Energy Forces Change
The Environment

The forces of wind, moving water, and heat in the earth are constantly changing the shape of the earth's surface. The energy for building up or breaking down the earth's surface comes from the sun or from heat within the earth.

MAN CHANGES THE ENVIRONMENT

*pp: 189-238, lessons 70-88
Time: 20 periods

We Add Pollutants to the
Environment

Pollutants are wastematerials that are harmful to the environment. Air pollutants are gases or particles not normally found in air. Air pollutants affect the health of living things, damage property and cause changes in the environment and weather conditions. Water becomes polluted when chemicals, organic wastes and heat are added to water. Population changes result in changes in the environment and increased competition for available food and space. Other kinds of pollution (heat and sound) also affect living things. Changes in environments can be so rapid that living things cannot adjust and do not survive.

Improving Our Environment

Solid waste may be used in a variety of ways to make it useful including recycling, land fill, construction, energy source. Special farming techniques, selection and ocean farming will result in increased crop yields. Practicing conservation will conserve our natural resources and endangered species.

SOCIAL STUDIES GRADE 6

<u>CONTENT AREA AND TOPIC</u>	<u>SKILLS AND KNOWLEDGE</u>
<u>HOW WE LEARN ABOUT THE PAST</u> Time: 4 weeks Sources of information Work of archeologists, historians, and anthropologists	We learn about the past from the work of social scientists such as archeologists. Information is obtained from many sources such as artifacts, oral traditions, and written records. Archeologists recreate the past from artifacts and material remains; historians from primary and secondary sources; anthropologists from direct observation techniques.
<u>HOW MODERN PEOPLE (HOMO SAPIENS) DEVELOPED</u> Time: 3 weeks	There was a lengthy period before man's appearance on earth. We record historical time in various ways. There were several forms of early man. All modern humans are homo sapiens. There are racial similarities and differences; humans are much more alike than different.
<u>HOW WESTERN CIVILIZATION DEVELOPED</u> Time: 17 weeks <u>Case Study of How Civilization Developed in Egypt.</u> Geographic factors influenced the development of civilization Government developed to meet the needs of the individual and of society Laws provide a picture of the society	Required: Select two of the following; Egypt; Greece; Mesopotamia. Egypt is the "gift of the Nile." Absolute monarchy and a rigid social class system developed. The Egyptian "Book of the Dead" reflects the moral and spiritual values of that society.

CONTENT AREA AND TOPIC

SKILLS AND KNOWLEDGE

Contributions have helped to shape present ways of life

Egyptians made numerous contributions, including a system of writing, sculpture, and architecture.

Art and literature reflect the society

Egyptian art in stone reflects the wealth of society.

HOW OTHER CIVILIZATIONS DEVELOPED

Time: 15 weeks

Required: Select two of the following; India; China; Pre-Columbian America; Africa

CURRENT AFFAIRS

Current affairs are studied to see how they affect children's lives and to assist in developing civic responsibility.

WORK STUDY SKILLS

Information on a topic is compared to discover agreement and disagreement. Fact and opinion are differentiated.

The need to change a conclusion in the light of evidence is recognized.

Information is presented in various forms: graphs, pictures, vocal, written.

Vocabulary of time expression is used: era, century, pre-historic, etc.

CREDITS *

ART

DEVELOPERS AND WRITERS OF ORIGINAL MATERIALS

Grace George Alexander-Greene, Head of Art Unit
Jack Rosenbaum, Assistant to Head of Art Unit

WRITERS AND/OR DEVELOPERS OF REVISIONS

Cecille Davis, Supervisor of Art, C.S.D. #6
Ruth Davis, Teacher, P.S. 166Q

REVIEWERS AND ADVISORS FOR REVISIONS

Grace George Alexander-Greene, Head of Art Unit
Shirley Hochman, Supervisor of Art

BILINGUAL EDUCATION, AND ENGLISH-AS-A-SECOND LANGUAGE

DEVELOPERS AND WRITERS OF ORIGINAL MATERIALS

Hernan LaFontaine, Executive Administrator, Center for Bilingual Education
Marco A. Hernandez, Deputy Executive Administrator, Center for Bilingual Education
David Krulik, Assistant Director, Center for Bilingual Education
Lily C. Din, Teacher-Trainer
Bernice Forman, Teacher-Trainer
Ron LeDonni, Teacher-Trainer
Marvin J. Pekkala, Teacher-Trainer
Eli Plotkin, Teacher-Trainer
Burt Posner, Teacher-Trainer
Richard Quintanilla, Teacher-Trainer

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Antonia Carranza, ESL/Bil. Coordinator, District 17

Barbara Gerard, Bilingual Project Director
Eleanor Jakubovitz, Bil. Coordinator, District 18
Jane London, Title VII Co-Coordinator, District 22

CAREER EDUCATION

DEVELOPER AND WRITER OF ORIGINAL MATERIALS

Dr. David A. Bickimer
Project Director,
Career Education Unit (1977)

REVIEWERS AND ADVISORS FOR REVISIONS

Juanita O. Ward
Project Director,
Career Education Unit
George R. Quarles
Chief Administrator,
Center for Career and Occupational Ed.

WRITER AND/OR DEVELOPER OF REVISIONS

Michael T. Quinn
Coordinator,
Career Education Unit

CHILD DEVELOPMENT FOCUS

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Thomas Cousins, Coordinator, Consumer Education Project
Adele Davidson, Early Childhood Supervisor
Elvina Goldfield, Assistant Coordinator, Follow Through Program
Carol Wineberg, Coordinator, Arts in General Education
Evelyn Jones, Facilitator, The Mini-Grant Program

Lois Knox, Educational Administrator, Follow Through Program
Marjorie McAllister, Coordinator, Follow Through Program
Sol Meldon, Coordinator, Gifted and Talented Program
Lilia Zarate, Psychologist, Follow Through Program

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The Communication Arts section was developed jointly by the English Language Arts Unit and the Center for Reading.

*Titles and affiliations were those in force at the time the materials were prepared.

CREDITS

DEVELOPERS AND WRITERS

Anita Wilkes Dore, Director
of English
Marian Traina Power,
Director (Acting)
Center for Reading

James Anello, Principal - P.S. 188 K
- District 21
Elva Collazo, Supervisor, Center for
Reading
Marion Deutsch, Teacher - P.S. 197
- District 22
Marilyn Funes, Reading Specialist,
Center for Reading
Marjorie Gaddy, Center for Reading
Rosalind Hanig, Teacher - P.S. 188 K
- District 21
Joel Hillman, Diagnostic Testing
Services
Beatrice Kachuck, Professor, Brooklyn
College
Eileen Kramer, District Reading
Coordinator - District 260
Etta Ladson, Assistant Principal,
formerly - I.S. 142 Q, Now
Chancellor's Task Force on Attendance
Harold Minsky, Director of Diag-
nostic Reading Program - District
290
Edith Novod, Assistant Director of
English, Center for the Humanities
and the Arts
Gloria Orlick, Reading Coordinator
- District 19
Benjamin Piltch, Reading Teacher -
I.S. 530 - District 27
Lenore Ringler, Professor, New York
University
Judith Schepis, Teacher Consultant
Rosemary Wagner, Curriculum
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District 19

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Carmen Dinos, Professor, Brooklyn
College
Lerida de Dios, Resource Teacher -
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Sylvia Glass, Teacher - P.S. 189 -
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District 22
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Jerome Green, Principal - P.S. 111 M
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District 19
P. Jerry Hutchins, Supervisor of Reading
Bureau of Reading State Education Dept.
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Michelle Jones, Title I Corrective
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Harriet Kaufman, Teacher - P.S. 13 K -
District 19
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District 6
Leslie Korant, Teacher Trainer -
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P.S. 65 - District 19
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ESEA IV C
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English - I.S. 126 Q
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University
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University
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Beverly Taylor, Reading Coordinator -
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Lucille Thomas, Assistant Director,
Center for Library, Media and
Telecommunications
E. Trowbridge, Teacher - P. S. 13K
District 19
Barry Weider, Assistant Principal
District 16

FOREIGN LANGUAGE

DEVELOPER AND WRITER

David Weiss, Asst. Director,
Center for the Humanities and the Arts

REVIEWERS AND ADVISORS FOR REVISIONS

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Gary Lee, Teacher,
Murry Bergtraum H.S.

French: Emile Beux, Asst. Principal,
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Roselle Meyrowitz, Asst. Principal,
Midwood H.S.

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J.H.S. 93Q
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Curtis H.S.

Hebrew: Solomon Moskowitz, Associate in
Secondary Education, Board of
Jewish Education
Stanley Sobolofsky, Teacher,
J.H.S. 141X

Italian: Adele Farella, Asst. Principal,
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FLES: Harriet Bryer, Principal,
P.S. 177Q
Eleanor Roth, Teacher,
P.S. 60Q

HEALTH EDUCATION

Melvin Warren, Assistant Director Health
Education, writer.
Revisions were based on field evaluations.

HOME ECONOMICS

DEVELOPERS AND WRITERS:

Kathleen V. Rogers
Home Economics
Olga E. Sobelsohn
Assistant Director
Sylvia B. Anker and Claire S. Rosenthal
Supervisors

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DEVELOPERS AND WRITERS

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Emanuel Gillers, Asst. Director
of Industrial Arts

Samuel Garry, Supervisor
of Industrial Arts
David Berlin, Supervisor
of Industrial Arts - Special Education
Carl Brenner, Supervisor
of Industrial Arts
On Chin, Teacher-Trainer
of Industrial Arts - Special Education
Robert Fixler, Supervisor
of Industrial Arts
Nathan L. Friedman, Supervisor
of Industrial Arts

LIBRARY MEDIA

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Library Unit, Center for Library, Media and
Telecommunications
Lucille Thomas, Assistant Director, Elementary
School Library Media Centers, Center for
Library, Media and Telecommunications
Cathleen Mahoney, Elementary School Library
Media Specialist, Center for Library, Media
and Telecommunications
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Caravan, District 16
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Librarians' Association

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 H.S.
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 Thomas Franks, Teacher, JHS 117M
 Dorothy Geddes, Prof. Math Ed. Bklyn
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 Blanche C. Gladstone, Corrective Math
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 State Education Department
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 Corrective Mathematics Program
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 Stephen S. Willoughby, Prof. of Math Ed.,
 N.Y.U.

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 and Science
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 Shirley Brady, Math Coordinator, Dist. 17
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 Asta Halrston, Supervisor
 of Music, District 17

PHYSICAL EDUCATION

DEVELOPERS AND WRITERS

Angela Zirpiades, Assistant Director,
 Physical Education
 Lillian Vitaglione, Movement Specialist -
 P.S. 41 - wrote grades K - 6
 Bernard Kirschenbaum, Assistant Director,
 Physical Education - wrote grades 7 - 9
 Revisions were based on field evaluations
 and the new curriculum bulletin.

SCIENCE

DEVELOPERS AND WRITERS OF ORIGINAL MATERIALS

Sam Fried, Asst. Director, Science, Center
 for Mathematics and Science, Center for
 Curriculum and Instruction

Barry Wiesenfeld, Science Coordinator,
 District 24

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 Science, J.H.S. 202Q
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 Science, I.S. 292K
 Thomas Vinci, Associate Dean,
 Graduate Studies, Fordham University
 Alan Winkler, Science Resource Teacher,
 District 22

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Pearl Abrams, Teacher, P.S. 26Q

CREDITS

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Carmen Farina, Teacher, P.S. 29K
Marilyn Fast, Asst. Principal, P.S. 89Q
Betty Garrett, Asst. Principal
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Miriam Iversen, Teacher, P.S. 26Q

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Lorraine Rhodes, Teacher, P.S. 29K
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Zara Schenbaum, Teacher, P.S. 34M
Andrew F. Smith, Global Perspectives in
Education
Lenore Wiesenbergl, Teacher, P.S. 236K

(Standing Committee)
Alan Argoff, District Supervisor, C.S.D.#22
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High School
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Larry Pero, Asst. Principal, John Dewey H.S.
Irwin Rosenfeld, Asst. Principal, I.S. 44M
Harvey Seligman, Asst. Principal, I.S. 253

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for the Humanities and the Arts
Albert Post, Asst. Director, Center for
the Humanities and the Arts
Jerry Blumengarten, Teacher, J.H.S. 166K
Martin Cohen, Asst. Principal, Halsey J.H.S.
Alfred D. Herman, Principal, P.S. 139K

TYPEWRITING

DEVELOPERS AND WRITERS

Norman E. Watnick
Assistant Director,
Business and Distributive Ed.
Donald Donin
Coordinator, Business and
Distributive Ed.

REVIEWERS AND ADVISORS

Shirley Silvers, Dept. of
Business, Queens Community
College
Robert G. Fleig, Bureau of
Business Education, State
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Catherine Stapleton, President
JHS Typewriting Teachers'
Association
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CENTER FOR CURRICULUM DEVELOPMENT

Susan S. Aaron
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Gertrude Blaustein (Proofreading assistant)
Rosemary Stroer (Editing - experimental edition)

APPENDIX A: PHONEME TABLES

Table 10-1. Consonant Correspondences in Various Positions *

[This chart, provided for teacher reference, is to be used at the teacher's discretion. Individual items are to be taught to the children as and when needed.]

Sound or Phoneme	Letter Label	Position			Sound or Phoneme	Letter Label	Position		
		Initial	Medial	Final			Initial	Medial	Final
/b/	b	bat	tuba	cab	/n/	ng		singer	sing
/k/	c	can				n		drink	
	k	kitten	baker	break	/p/	p	picnic	piper	drip
	ck		packer	sack		pp		supper	
	ch	chasm			/r/	r	rain	bearer	car
	qu	quick	liquor	opaque		rr		hurry	burr
/s/	s	sit				wr	wreck		
	ss		passer	pass		rh	rhetoric		
	c	city	racer		/ʃ/	sh	ship	smasher	lash
/t/	ps	psalm				s	sure		
/tʃ/	ch	chip	catcher	rich		ci		specious	
	c	cello				ce		ocean	
/d/	d	doll	soda	mad		ss		passion	
/f/	f	fit	heifer	life		ti		nation	
	ff		baffle	cuff	/t/	t	teacher	meter	hit
	ph	photo	siphon			tt		sitter	
	gh			rough		pt			receipt
/g/	g	get	tiger	rag		bt		debtor	debt
	gh	ghetto			/θ/	th	thin	ether	path
	gg		bigger		/ð/	th	then	either	bathe
/j/	g	gym		rage	/v/	v	voice	mover	wave
	j	jump			/w/	w	work	shower	cow
	dg		ledger	badge	/ks/	x			box
/h/	h	house	ahead		/y/	y	yard	Sawyer	say
	wh	who			/z/	z	zoo	blazer	
/l/	l	lake	sailor	metal		s		loser	dogs
	ll		filling	hall		zz		nozzle	jazz
/m/	m	man	hammer	ham	/z/	z		azure	
	mb		comber	tomb		s		measure	
	mm		summer			si		delusion	
/ŋ/	n	night	finer	hen					
	nn		sinner						
	gn	gnaw							
	kn	knit							

* Robert B. Ruddell, Reading-Language Instruction: Innovative Practices (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974) pp. 297-298. Reprinted by permission.

Table 10-2. Vowel Correspondences **

<i>Sound Label</i>	<i>Vowel</i>	<i>Letter Label</i>	<i>Example</i>
Unglided or short	/æ/	a	at
		au	laugh
Glided or long	/ey/	a e	lane, ate
		ai	bait
		ea	break
		ei	rein
Unglided or short	/e/	e	men
		ea	head
		eo	leopard
		ai	said
Glided or long	/iy/	ie	friend
		e e	Pete
		e	be
		ea	beat
		ee	beet
		ei	receive
		ie	belief
Unglided or short	/i/	i	bit
		ui	build
		y	hymn
		u	busy
Glided or long	/ay/	i e	bite
		uy	buy
		ie	flies
		ai	aisle
Unglided or short	/a/	o	hot
Glided or long	/ow/	o e	home
		o a	boat
		ow	show
		o	go
		ew	sew

<i>Sound Label</i>	<i>Vowel</i>	<i>Letter Label</i>	<i>Example</i>
Unglided or short	/a/	u	bus
		oo	blood
		ou	enough
Glided or long	/yow/	u e	mule
		ew	few
Unglided or short	/u/	oo	good
		u	put
		ew	flew
		ui	fruit
Unglided or short	/ɔ/	a	talk
		/u/	Paul
		o	dog
		aw	law
Glided or diphthong	/aw/	ow	drown
		ou	loud
Glided or diphthong	/ɔy/	oy	toy
		oi	coin
Note: an unglided or short vowel followed by -r is sometimes referred to as an r-controlled vowel	/ar/, /er/	ar, ea	cart, pear
		/ir/, /ɔr/	ear, oar
		/ur/, /yur/	poor, pure
		/ər/	her

APPENDIX B: CURRICULUM PUBLICATIONS

PRINTED PUBLICATIONS

Available from:

Publication Sales Office
New York City Board of Education
110 Livingston Street
Brooklyn, New York 11201

ART

Art in the Elementary Schools
1963-64, No. 8: 146 p.

Art for the Middle School
1977-78, No. 3: 127 p.

Art Teaching Guides: Puppets and Puppetry
1968-69, No. 8h (Reprinted 1975):
20 p.

COMMUNICATION ARTS

Handbook for Language Arts: Pre K-Grade 2
1965-66, No. 8 (Reprinted 1975): 416 p.

Sequential Levels of Reading Skills:
Grades Pre K-12
1967-68, No. 4 (Reprinted 1970, 1975
1979): 324 p.

Handbook for Language Arts: Grades 3 and 4
1969-70, No. 6: 360 p.

Handbook for English Language Arts,
Grades 5-12: Reading and Literature
1967-68, No. 10 (Reprinted 1969,
1975, 1979): 324 p.

Handbook for English Language Arts,
Grades 5-12: Speech and Composition
1969-70, No. 21: 221 p.

Handbook for English Language Arts:
Grades 5-12: Language Strand
1974-75, No. 4: 286 p.

ENGLISH AS A SECOND LANGUAGE

ESL: Teaching English as a Second
Language in the Middle Grades
1967-70, No. 7: 190 p.

FOREIGN LANGUAGES

Chinese: Levels 1 and 2
1972-73, No. 7: 165 p.

German: Levels 1-4
1966-67, No. 11c: 222 p.

Hebrew: Levels 1-4
1966-67, No. 11b: 207 p.

Latin: Levels 1-4
1967-68, No. 19: 146 p.

Russian: Levels 1-4
1970-71, No. 6: 224 p.

HEALTH EDUCATION

Health Education in the Elementary
Schools
1969-70, No. 2: 249 p.

Health Education in the Secondary
Schools
1972-73, No. 10: 341 p.

CURRICULUM PUBLICATIONS, (cont.)

HOME ECONOMICS

Home Economics Grades 7-8-9 **
1963-64, No. 4: 169 p.

Young New Yorker's Cookbook
1973-74, No. 9: 244 p.

INDUSTRIAL ARTS

Ceramics for Secondary Schools
1961-62, No. 7 (Reprinted 1966,
1974): 130 p.

Industrial Ceramics
1971-72, No. 5: 133 p.

Drafting Experiences for Intermediate
School Pupils: A Resource Bulletin
for Teachers of Industrial Arts
1966-67, No. 9 (Reprinted 1970):
75 p.

Electricity - Electronics for Inter-
mediate and Junior High School
1970-71, No. 11: 196 p.

Graphic Arts Grades 7-8-9
1965-66, No. 13: 65 p.

Metalworking for Secondary Schools
1966-67, No. 7: 191 p.

Woodworking: Grades 7-8-9
1965-66, No. 14: 67 p.

Industrial Arts Woodworking: Secondary
Schools
1963-64, No. 10 (Reprinted 1969):
111 p.

MATHEMATICS

Mathematics: Pre K-1, Part I
1966-67, No. 6a (Reprinted 1968,
1974): 67 p.

Mathematics: Pre K-1, Part II
1966-67, No. 6b: 150 p.

Mathematics: Grade 1 - Scope and
Sequence
1970-71, No. 2: 16 p.

Mathematics: Grade 2
1977-78, No. 11: 180 p.

Mathematics: Grade 3
1977-78, No. 9: 172 p.

Mathematics: Grade 4 and Grade 5 -
Scope and Sequence
1969-1970, No. 8 (Reprinted 1973,
1975): 46 p.

Mathematics: Grade 6 - Scope and
Sequence
1970-71, No. 4: 22 p.

Mathematics: 9th Year
1966-67, No. 4 (Reprinted 1969):
304 p.

General Mathematics: 9th Year
1964-65, No. 16 (Reprinted 1968,
1970): 270 p.

CURRICULUM PUBLICATIONS, (cont.)

MUSIC

Teaching Music: Grades K-4
1978-79, No. 5: 99 p.

Grade 7: American History: Historical
Development of the United States
1967-68, No. 2e (Reprinted 1970):
130 p.

SCIENCE

Science: Grades K-2
1965-66, No. 7 (Reprinted 1968,
1970, 1975): 267 p.

Science: Grades 3-4
1966-67, No. 11 (Reprinted 1969,
1975): 339 p.

Science: Grade 5
1968-69, No. 6 (Reprinted 1974):
264 p.

Science: Grade 7
1971-72, No. 2: 313 p.

Science: Grade 8
1967-68, No. 20: 400 p.

Science: Grade 9
1968-69, No. 9: 309 p.

Grade 9: World Studies: Eastern
Civilizations - Regional Studies
(Revised Edition)
1969-70, No. 12: 397 p.

SOCIAL STUDIES

Grade 1: Living and Working Together
in the Community
1967-68, No. 26 (Reprinted 1970,
1976): 113 p.

Grade 2: How People Live in City
Communities Around the World
1968-69, No. 2: 199 p.

Grade 4: American People and Leaders:
How the United States Began and
Grew
1968-69, No. 3: 130 p.

CURRICULUM PUBLICATIONS

EXPERIMENTAL PUBLICATIONS

Available from:

Center for Curriculum Development
New York City Board of Education
131 Livingston Street Room 601
Brooklyn, New York 11201

ART

Art in the High School
May 1974: 102 p.

FOREIGN LANGUAGES

Foreign Language Revision Program:
French
June, 1975,: 99 p.

Foreign Language Revision Program:
Italian
June, 1975: 99 p.

Foreign Language Revision Program:
Spanish
June, 1975: 102 p.

INDUSTRIAL ARTS

Industrial Arts Aerospace for
Intermediate and Junior High
School, Part 2
August, 1970: 120 p.

Graphic Arts for Secondary Schools
March, 1970: 159 p.

Paste Make-up -- A Teaching Guide
Summer, 1970: 76 p.

Plastics for Secondary Schools
June, 1967: 195 p.

School Shop Safety Manual
October, 1977: 225 p.

Teachers Handbook for the Handicapped **

** Available from:

Industrial Arts
N.Y.C. Board of Education
131 Livingston Street Room 511
Brooklyn, N.Y. 11201

MATHEMATICS

Fundamentals of Mathematics, Part 1
November, 1978: 144 p.

Fundamentals of Mathematics, Part 2
November, 1978: 136 p.

MUSIC

Teaching Music, Grades 5 and 6
December, 1975: 106 p.

SCIENCE

Investigating our Environment, Science
Grade 6
June, 1974: 248 p.

SOCIAL STUDIES

Grade 8: Urban Growth: Citizenship in
a Changing Society
December, 1978